HANDBOUND
AT THE

UNIVERSITY OF
TORONTO PRESS

Digitized by the Internet Archive
in 2010 with funding from
University of Toronto

http://www.archive.org/details/digestofcomments125nati

2307
I

TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY—BULLETIN No. 125
AUGUST, 1920

Biological
& Medical
Serials

DIGEST OF COMMENTS
ON
THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA
AND ON THE
NATIONAL FORMULARY

FOR THE CALENDAR YEAR
ENDING DECEMBER 31
1917

By

A. G. DuMEZ

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920

RA
421
U4
no.125
cp.2

LIBRARY
DEC 28 1966
UNIVERSITY OF TORONTO

1156446

ORGANIZATION OF HYGIENIC LABORATORY.

Hugh S. Cumming, *Surgeon General,*
United States Public Health Service.

ADVISORY BOARD.

Col. Eugene R. Whitmore, Medical Corps, United States Army; Rear Admiral E. R. Stitt, United States Navy; Dr. John R. Mohler, Chief of United States Bureau of Animal Industry; and Surg. George W. McCoy, United States Public Health Service, *ex officio.*

Prof. William H. Welch, Johns Hopkins University, Baltimore, Md.; Prof. Simon Flexner, Rockefeller Institute for Medical Research, New York; Prof. Victor C. Vaughan, University of Michigan, Ann Arbor, Mich.; Prof. William T. Sedgwick, Massachusetts Institute of Technology, Boston, Mass.; Prof. M. P. Ravenel, University of Missouri, Columbia, Mo.

LABORATORY CORPS.

Director.—Surg. George W. McCoy.

Assistant director.—Surg. A. M. Stimson.

Senior pharmacist.—C. O. Sterns, Ph. G.

Junior pharmacist.—Claude C. Cannon, Ph. C.

Artist.—Leonard H. Wilder.

Librarian.—Murray G. Motter, A. M., M. D.

DIVISION OF PATHOLOGY AND BACTERIOLOGY.

In charge of division.—Surg. George W. McCoy.

Assistants.—Surgs. B. J. Lloyd, Edward Francis, Arthur M. Stimson, Passed Asst. Surgs. C. W. Chapin, H. E. Hasseltine, James P. Leake, Mather H. Neill, Gleason C. Lake.

Bacteriologist.—T. W. Kemmerer, M. D.

Sanitary Bacteriologists.—Hugh B. Corbitt, B. S., Ida A. Bengtson, Ph. D., Alice C. Evans, M. S., Ella M. A. Enlows, M. S.

Technical Assistant.—Walter D. Cannon, LL. B., A. M., M. D.

Bacteriologic Technician.—William Lindgren.

DIVISION OF ZOOLOGY.

Chief of Division.—Ch. Wardell Stiles, Ph. D.

Assistant.—Surg. Joseph Goldberger.

Laboratory Aids.—Mary L. Brown, B. E., Elizabeth Rountree, B. S., A. B., Margaret Wood, B. S., Gordon Thomson, A. B.

DIVISION OF PHARMACOLOGY.

Chief of Division.—Carl Voegtlin, Ph. D.

Technical Assistants.—Atherton Seidell, Ph. D., A. G. DuMez, Ph. D., George B. Roth, M. D.

Physiologist.—Alfred E. Livingston, M. S., Ph. D.
Pathologic Physiologist.—Charles W. Hooper, M. D.
Chemist.—James M. Johnson, Ph. D.
Assistant Pharmacologist.—Homer W. Smith.
Junior Chemist.—John W. Thompson, B. S.
Scientific Assistant.—K. Dorothy Wright, A. B.

DIVISION OF CHEMISTRY.

Chief of Division.—William Mansfield Clark, Ph. D.
Chemist.—Elias Elvove, Phar. D., Ph. D.
Associate Chemist.—Barnett Cohen, Ph. D.
Technical Assistant.—Hyman L. Shoub, B. S.
Assistant Chemist.—Charles G. Remsburg, B. S.

SPECIAL DETAIL.

Special Experts Julius Stieglitz, Ph. D., A. Parker Hitchens, M. D., Russell L. Cecil, M. D.

Assistant Chemist W. A. Perlsweig, B. S.

Assistant Bacteriologist Liston A. Steffin, B. S.

TABLE OF CONTENTS.

Page.

Preface 9

List of the literature reviewed:

- 1. Title abbreviations—Journals 13
- 2. Title abbreviations—Pharmacopœias and nonofficial standards 20

I. General comments:

- 1. Legal status and development—
  - 1. Pure food and drug laws 21
  - 2. Sale and use of poisons 22
  - 3. Sale and use of narcotic drugs 23
  - 4. Sale and use of household remedies 26
  - 5. Drug inspection work 27
  - 6. The Pharmacopœia as a legal standard 28
  - 7. Supplement to the Pharmacopœia 29
  - 8. United States Pharmacopœial Convention 29
  - 9. General principles to be followed in revising the Pharmacopœia. 30
  - 10. Publication and control 30
  - 11. The physician and the Pharmacopœia 30
  - 12. Value of criticism 31
  - 13. Committee of revision 31
  - 14. Nature and progress of revision 32
- 2. Scope—
  - 1. Nature and content of the Pharmacopœia 33
  - 2. The Pharmacopœia as a textbook 35
  - 3. A limited materia medica 35
  - 4. Nomenclature 35
  - 5. Doses 36
  - 6. Antidotes 36
  - 7. Weights and measures 37
  - 8. Objects and uses 39
  - 9. Additions and deletions 39
  - 10. Purity and strength 39
  - 11. Atomic weights 40
- 3. Nonpharmacopœial standards—
  - 1. National Formulary 41
  - 2. Recipe book 42
  - 3. New and nonofficial remedies 43
    - Synthetics 44
    - New remedies 44
    - Patents and trade-marks 45
    - Chemotherapy 47
    - Radioactivity 48
  - 4. Biological products 50
    - Enzymes 51
    - Organotherapy 52
    - Serums and vaccines 52
    - Biological methods and tests 55
  - 5. Antiseptics and disinfectants 61

I. General statements—Continued. Page
  4. Analytical data 63
    1. Interpretation 64
    2. Reagents and test solutions 64
    3. Volumetric solutions 68
    4. Indicators 68
    5. Physical constants 69
      Specific gravity 69
      Solubilities 70
      Melting point determination 71
      Boiling point determinations 72
      Thermometry 72
      Polarization and refraction 72
    6. Chemical constants 73
    7. Viscosity 76
    8. [illegible] 77
    9. [illegible] and values 77
    10. Analytical methods and results 78
    11. Tests 83
      Halogens 83
      Hydrogen sulphide 85
      Sulphur, sulphides and sulphates 85
      Phosphorus and phosphates 86
      Nitrogen, nitrates, hydroxides 86
      Ammonia 87
      Carbon and carbonates 87
      Alkali compounds 88
      Alkaline-earth compounds 89
      Antimony and arsenic 89
      Metals 90
      Organic compounds 92
      Stains 93
    12. Diagnostic reagents and clinical tests 95
      Urine 96
        Acidity 99
        Acetone 99
        Albumin 100
        Ammonia 101
        Bile 101
        Blood 101
        Glucose 102
        Indican 102
        Sulphur 102
        Sugar 102
        Urea 103
        Uric acid 103
      Blood 104
      Gastric contents 105
      Feces 105
      Sputum 107
      Cerebrospinal 108
  5. Vegetable drugs 110
    1. Cultivation of medicinal plants 111
    2. Powdered drugs [illegible]

I. General comments—Continued.
  5. Vegetable drugs—Continued. Page.
    3. Moisture determinations 115
    4. Ash determinations 116
    5. Glucosides 116
    6. Alkaloids 116
    7. Miscellaneous plant constituents 118
    8. Assay processes 121
    9. Physiological standardization 123
  6. Pharmaceutical preparations 124
    1. General formulas 125
    2. Standardization 125
    3. Galenicals 126
      Deterioration 127
    4. Incompatibility 127
    5. Extraction 128
    6. Sterilization 128
    7. Forms of administration 129
      Ampoules 129
      Capsules 130
      Compressed tablets 130
II. International standards:
  1. The evolution of uniformity in pharmacopœial standards and for potent medicaments 130
    1. Adoption of Brussels Conference Protocol 130
  2. Foreign pharmacopœias 131
    1. British 131
    2. Norwegian 131
    3. Italian 131
    4. Swiss 131
    5. Dutch 132
    6. Brazilian 132
    7. Danish 132
III. Comments on official articles 132

PREFACE.

This compilation of references to the literature on subjects of interest with respect to the revision of the Pharmacopœia of the United States of America and the National Formulary constitutes the thirteenth number in the series of Digest of Comments.

In this, as in the previous numbers, an effort has been made to present in a brief, concise form working references to all published articles relating directly or indirectly to the official drug standards mentioned above. With this object in view, all the available chemical, medical, and pharmaceutical periodicals and reports have been carefully reviewed and abstracted. In those cases in which the periodical containing the original article was not available, as was frequently the case with certain foreign publications which have not been regularly received in this country since the beginning of the war, the reader has been referred to the journal in which an abstract of the article appeared. This procedure was thought to be preferable to withholding the comment until some future date when the periodical containing the original article might become available.

The relation of the Pharmacopœia to public-health work is becoming more and more evident, as shown by the attention being devoted in pharmacopœias generally to the materials and tests employed in clinical laboratories and to the standardization of disinfectants and biologics. In this connection, the enormous increase in the use of arsenicals, as a result of the antivenereal disease campaigns being waged in all civilized countries, is also important. For this reason a fairly comprehensive compilation of references to the literature on these subjects has also been included in this bulletin. These references should prove to be of more than ordinary value to officials engaged in public health work.

As heretofore, an attempt has been made to record the comments on foreign pharmacopœias and standards. Work on the European standards, however, appears to have been greatly curtailed as the result of the war, since there has been comparatively little published along this line during the past year. This condition becomes significant when we take into consideration the fact that only 19 of all the national pharmacopœias have been revised since 1900, and only the Argentine pharmacopœia, of all the standards of the South

American States, has been revised in this century. Among the few important items of general interest in this connection there may be mentioned the appearance of a commentary on the Norwegian pharmacopoeia, the increased interest in the revision of the Swiss pharmacopoeia, which was last revised in 1907, and the advocation of the publication of a Brazilian pharmacopoeia by the medical congress recently held at Sao Paulo. References to the available literature on foreign standards are given under the headings designated by the names of the respective pharmacopoeias.

The stimulus given to experiments in the cultivation of medicinal plants in this and other countries as a result of the war in Europe is still noticeable, as evidenced by the numerous articles and treatises on the subject which have been published during the past year. In fact, the experimental stage in the cultivation of a number of the more important drug plants has already been passed, and they are now being produced in this country on a commercial scale—e. g., belladonna, stramonium, digitalis, cannabis, etc. References to published articles of this nature are included under a separate heading entitled "Cultivation of Medicinal Plants."

In addition to the foregoing an effort has been made to reflect the literature on legal matters which may have an indirect or future value in connection with the revision of the two official drug standards heretofore mentioned. For this reason, abstracts of the more important articles dealing with food and drug laws, poison laws, antinarcotic laws, the sale and use of household remedies, and drug inspection work have been included. Comments of this nature are, in greater part, grouped under separate headings, but may occur under comments on official articles when they have a specific application, as is frequently the case with the items relating to drug inspection work.

For the information of those who may not be familiar with the nature of the bulletins of this series, attention is directed to the fact that the space devoted to a reference is not infrequently in inverse proportion to its recognized importance, though some idea of the nature and value of the original article may be obtained from its length as indicated by the page reference. In order to learn accurately a given writer's ideas or the context of his paper, the original communication should be consulted whenever practicable. The intent in the preparation of these abstracts has been to call attention to the character and scope of the original paper rather than to record its actual content.

In conclusion, the compiler desires to express the appreciation of the bureau to the publishers and editors of the journals, periodicals, and reports furnished in exchange; to the secretaries of State and national pharmaceutical organizations for copies of their annual proceedings; to John Uri Lloyd, of Cincinnati, for copies of the eclectic medical journals; to the editor of Chemical Abstracts for the loan of several publications; and to the officers of the library of the Department of Agriculture, the library of the Office of the Surgeon General of the Army, Washington, and the Library of Congress for the use of reports and periodicals not on file in this laboratory.

A. G. D.

DIVISION OF PHARMACOLOGY,
HYGIENIC LABORATORY,
January 23, 1920.

LIST OF THE LITERATURE REVIEWED.

1. TITLE ABBREVIATIONS—JOURNALS.

Abstr. Bact.—Abstracts of Bacteriology, Baltimore, 1917, v. 1.

Am. Druggist.—American Druggist and Pharmaceutical Record, New York, 1917, v. 65.

Am. Food J.—American Food Journal (The), Chicago, 1917, v. 12.

Am. J. Clin. Med.—American Journal of Clinical Medicine, 1917, v. 24.

Am. J. Dis. Children.—American Journal of Diseases of Children, 1917, v. 15.

Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1917, v. 153.

Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1917, v. 89.

Am. J. Physiol.—American Journal of Physiology, Boston, 1917, v. 42, 43.

Am. J. Public Health.—American Journal of Public Health, 1917, v. 7.

Am. J. Sc.—American Journal of Science, New Haven, 1917, v. 43, 44.

Am. J. Syphilis.—American Journal of Syphilis, 1917, v. 1.

Am. Med.—American Medicine, 1917, v. 23.

Am. Perf.—The American Perfumer and Essential Oil Review, 1917, v. 11, Nos. 11–12, and v. 12, Nos. 1–10.

Am. Rev. Tuberculosis.—American Review of Tuberculosis, 1917, v. 1.

Anales soc. española fis. quim.—Anales de la sociedad española de fisica y quimica, Madrid, 1915, v. 13.

Anales soc. quim. Argentina.—Anales Sociedad quimica, Argentina, 1917, v. 5.

Analyst (The), London, 1917, v. 42.

Ann. Bot.—Annals of Botany, London, 1917, v. 31.

Ann. chim. analyt.—Annales de chimie analytique, Paris, 1917, v. 22.

Ann. chim. applicata.—Annali di chimica applicata, Roma, 1917, v. 7, 8.

Ann. Falsif.—Annales de falsifications, Paris, 1917, v. 10.

Ann. inst. Pasteur.—Annales de l'Institut Pasteur, Paris, 1917, v. 31.

Apothecary (The), Boston, 1917, v. 29.

Apoth.-Ztg.—Apotheker-Zeitung, Berlin, 1916, v. 31; 1917, v. 32.

Arch. Chem. Mikros.—Archiv für Chemie und Mikroskopie, Wien, 1916, v. 9. Nos. 1 and 2.

Arch. exper. Path. u. Pharmakol.—Archiv für experimentelle Pathologie und Pharmakologie, 1917, v. 80, 81.

Arch. farmacol. sper.—Archivio di farmacologia sperimentale e Scienze affini, Roma, 1917, v. 23, 24.

Arch. Int. Med.—Archives (The) of Internal Medicine, Chicago, 1917, v. 19.

Arch. med. pharm. mil. Paris.—Archives de medicine et de pharmacie militaires, Paris, 1917, v. 67, 68.

Arch. med. pharm. nav. Paris.—Archives de medicine et pharmacie navales, Paris, 1917, v. 103, 104.

Arch. Pharm. Chem.—Archiv for Pharmaci og Chemi, Copenhagen, 1917, v. 24.

Atti accad. Lincei.—Atti della reale accademie dei Lincei, 1917, v. 26.

Biochem. J.—Biochemical Journal, Liverpool, 1917, v. 11.

Boll. chim. farm.—Bolletino Chimico-Farmaceutico, Milan, 1917, v. 56.

Boston M. & S. J.—Boston Medical and Surgical Journal, 1917, v. 176, 177.

Bot. Gaz.—Botanical Gazette, Chicago, 1917, v. 63, 64.

Brit. Food J.—British Food Journal, London, 1917, v. 19.

Brit. M. J.—British Medical Journal, London, 1917, v. 1, 2.

Bull. Arizona Bd. Health.—Bulletin of the Arizona State Board of Health, 1917, v. 6.

Bull. Assoc. Gén. Syn. Pharm. France.—Bulletin de l'Association Générale des Syndicats Pharmaceutiques de France, 1917, v. 20.

Bull. Bur. Stand.—Bulletin of the Bureau of Standards, Department of Commerce, 1917, v. 13.

Bull. California Bd. Health.—Monthly Bulletin of the California State Board of Health, 1917.

Bull. Connecticut Agric. Exper. Sta.—Bulletin of the Connecticut Agricultural Experiment Station, 1917, Nos. [illegible].

Bull. Connecticut Bd. Health.—Monthly Bulletin of the Connecticut State Board of Health, Hartford, 1917, v. 31.

Bull. Florida Bd. Health.—Bulletin of the Florida State Board of Health, Jacksonville, 1917, v. 12.

Bull. Georgia Dept. Agric.—Bulletin of the Georgia Department of Agriculture, 1917, v. 4, Nos. 1, 5.

Bull. Hyg. Lab.—Bulletin, Hygienic Laboratory, U. S. Public Health Service, 1917, No. 110.

Bull. Illinois Bd. Health.—Bulletin of the Illinois State Board of Health, Springfield, 1917, v. 3.

Bull. Imp. Inst.—Bulletin of the Imperial Institute, London, 1917, v. 15.

Bull. Indiana Bd. Health.—Monthly Bulletin of the Indiana State Board of Health, Indianapolis, 1917, v. [illegible].

Bull. Iowa Bd. Health.—Bulletin, Iowa State Board of Health, Des Moines, 1917.

Bull. Kansas Bd. Health.—Bulletin of the Kansas State Board of Health, 1917, v. 12, 13.

Bull. Kentucky Agric. Exper. Sta.—Bulletin of the Kentucky Agricultural Experiment Station, 1917.

Bull. Kentucky Bd. Health.—Bulletin of the State Board of Health of Kentucky, 1917, v. 7.

Bull. Lab. Inl. Rev. Dept. Canada.—Bulletin of the Laboratory of the Inland Revenue Department, Ottawa, Canada, 1917.

Bull. Louisiana Bd. Health.—Quarterly Bulletin of the Louisiana State Board of Health, 1917, v. 8.

Bull. Maine Bd. Health.—Bulletin of the State Board of Health of Maine, Augusta, 1917, v. 4.

Bull. Massachusetts Bd. Health.—Bulletin of the Massachusetts State Board of Health, 1917, v. 4.

Bull. Michigan Bd. Health.—Public Health, published by the Michigan State Board of Health, Lansing, 1917.

Bull. Michigan D. & F. Dept.—Bulletin of the Michigan Dairy and Food Department, 1917, Nos. [illegible].

Bull. Mississippi Bd. Health.—Health Bulletin of the Mississippi State Board of Health, Jackson, 1917, v. 6, 7.

Bull. Montana Bd. Health.—Bulletin (Special) of the Montana State Board of Health, Helena, 1917.

Bull. Montana Dept. Pub. Health.—Bulletin of the Department of Public Health of the State of Montana, Helena, 1917.

Bull. New Hampshire Bd. Health.—Quarterly Bulletin of the State Board of Health of New Hampshire, 1917, v. [illegible], Nos. [illegible].

Bull. New Jersey Agric. Exper. Sta.—Bulletin of the New Jersey Agricultural Station, New Brunswick, 1917, No. [illegible].

Bull. New Jersey Dept. Health.—Public Health News Bulletin. Department of Health of the State of New Jersey, 1917, v. 2.

Bull. New York Agric. Exper. Sta.—Bulletin of the New York Agricultural Experiment Station, Geneva, 1917, No. 433, 434, 435, 439.

Bull. New York Dept. Health.—Bulletin of the New York State Department of Health, 1917, v. 12.

Bull. New York City Dept. Health.—Bulletin of the New York City Department of Health, 1917, v. 6.

Bull. North Carolina Bd. Health.—Bulletin of the Carolina State Board of Health, 1917, v. 32.

Bull. North Dakota Bd. Health.—Bulletin of the North Dakota State Board of Health, 1917, v. 10.

Bull. North Dakota Exper. Sta. F. Dept.—Bulletin (special) of the Food Department of the North Dakota Agricultural Experiment Station, 1917, v. 4.

Bull. N. W. D. A.—Bulletin of the National Wholesale Druggists' Association, 1917.

Bull. Ohio Bd. Health.—Bulletin of the Ohio State Board of Health, 1917, v. 8.

Bull. Pharm.—Bulletin of Pharmacy, Detroit, 1917, v. 31.

Bull. Porto Rico Agric. Exper. Sta.—Bulletin of the Porto Rico Agricultural Experiment Station, 1917.

Bull. Rhode Island Bd. Health.—Bulletin of the Rhode Island State Board of Health, 1917, v. 3.

Bull. sc. pharmacol.—Bulletin des sciences pharmacologiques, Paris, 1917, v. 24.

Bull. soc. chim. France. Bulletin de la société chimique de France, 1917, v. 21, 22.

Bull. soc. pharm. Bordeaux.—Bulletin des travaux de la Société de Pharmacie de Bordeaux, 1917, v. 55.

Bull. South Dakota F. & D. Dept.—Bulletin of the South Dakota Food and Drug Department, 1917, v. 4, 5.

Bull. U. S. Dept. Agric.—Bulletins of the U. S. Departemnt of Agriculture, 1917.

Bull. Vermont Bd. Health.—Bulletin of the Vermont State Board of Health, 1917, v. 17, Nos. 3, 4; v. 18, Nos. 1, 2.

Bull. West Virginia Bd. Health.—Bulletin of the West Virginia Public Health Council, 1917, v. 4.

Bull. Wyoming Agric. Exper. Sta.—Bulletin of the University of Wyoming Agriculture Experimental Station, 1917, No. 112.

Bur. Mines Tech. Papers.—U. S. Bureau of Mines Technical Papers, 1917, No. 181.

Canadian Pharm. J.—Canadian Pharmaceutical Journal, Toronto, 1917, v. 50, 51.

Centralb. f. Bakteroil.—Centralblatt für Bakteriologie, Parasitenkunde und Infectsionskrankheiten, Jena, 1917, v. 79, Nos. 5, 6, 7.

Chem. Abstr.—Chemical Abstracts, Easton, Pa., 1917, v. 11.

Chem. Analyst.—Chemist-Analyst (The), Phillipsburg, N. J., 1917, Nos. 20–23.

Chem. & Drug.—Chemist and Druggist, London, 1917, v. 89.

Chem. & Drug. Australas.—Chemist and Druggist of Australasia, Sydney, and Melbourne, 1917, v. 32.

Chem. Eng.—Chemical Engineer, Chicago, 1917, v. 25.

Chem. News.—Chemical News, London, 1917, v. 115, 116.

Chem. Weekblad.—Chemisch Weekblad, Amsterdam, 1917, v. 14.

Circ. Bur. Stand.—Circulars of the Bureau of Standards, U. S. Department of Commerce, 1917.

Com. Rep.—Commerce Reports, Daily Circular and Trade Reports issued by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce, 1917.

Compt. rend. acad, sc.—Comptes rendus hebdomadaires des séances de l'Academie des sciences, Paris, 1917, v. 164, 165.

Compt. rend. soc. biol.—Comptes rendus des séances et mémoires de la Société de Biologie, Paris, 1917, v. 80.

Critic and Guide, New York, 1917, v. 20.

C. U. C. P. Alumni J.—Columbia University College of Pharmacy Alumni Journal, New York, 1917, v. 24.

D. A. Apoth. Ztg.—Deutsch-Amerikanische Apotheker-Zeitung, New York, 1917, v. 38.

Drug and Chem. Markets.—Drug and Chemical Markets, 1917.

Drug. Circ.—Druggists Circular, 1917, v. 61.

Drug Topics, New York, 1917, v. 32.

Exper. Sta. Record.—Experiment Station Record, U. S. Department of Agriculture, 1917, v. 36, 37.

Farm. Españ.—La Farmacia Española, Madrid, 1917, v. 49.

Giorn. farm. chim.—Giornale di farmacia, di chimica e di scienze affini, Torino, 1916, v. 65; 1917, v. 66.

Japanese Med. Lit.—Japanese Medical Literature, 1917, v. 2.

J. Agric. Research.—Journal of Agricultural Research, 1917, v. 8, 9, 10, 11.

J. Am. Chem. Soc.—Journal of the American Chemical Society, Easton, Pa., 1917, v. 39.

J. Am. Inst. Homeop.—Journal of the American Institute of Homeopathy, Chicago, 1917, v. 9, 10.

J. Am. M. Assoc.—Journal of the American Medical Association, Chicago, 1917, v. 68, 69.

J. Am. Pharm. Assoc.—Journal of the American Pharmaceutical Association, Philadelphia, 1917, v. 6.

J. Am. Vet. Med. Assoc.—Journal of the American Veterinary Medical Association, Ithaca, 1917, v. 50.

J. Assoc. Off. Agric. Chem.—Journal of the Association of Official Agricultural Chemists, Baltimore, 1917, v. 3, No. 1.

J. Bact.—Journal of Bacteriology, Baltimore, 1917, v. 1, 2.

J. Biol. Chem.—Journal of Biological Chemistry, New York, 1917, v. 27-32.

J. Chem. Soc. Lond.—Journal of the Chemical Society, London, 1917, v. 111, 112.

J. chim. phys.—Journal de chimie physique, Genève et Paris, 1917, v. 15.

J. Exper. M.—Journal of Experimental Medicine, New York, 1917, v. 25, 26.

J. H. Hosp. Bull.—Johns Hopkins Hospital Bulletin, Baltimore, 1917, v. 28.

J. Immunol.—Journal of Immunology, Baltimore, 1917, v. 2.

J. Ind. & Eng. Chem.—Journal (The) of Industrial and Engineering Chemistry, Easton, Pa., 1917, v. 9.

J. Infec. Dis.—Journal (The) of Infectious Diseases, Chicago, 1917, v. 20, 21.

J. Illuminat. Engin. Soc.—Journal (The) of the Illuminating Engineering Society, 1917, v. 12.

J. Lab. & Clin. Med.—Journal (The) of Laboratory and Clinical Medicine, St. Louis, 1916-17, v. 2.

Journal-Lancet.—The Journal-Lancet. The Journal of the Minnesota State Medical Association and Official Organ of the North Dakota and South Dakota State Medical Associations, Minneapolis, 1916, v. 36.

J. [illegible]—Journal of the [illegible] Society, [illegible], 1917, v. [illegible]

J. Med. Research.—Journal of Medical Research, Boston, 1917, v. 36, 37.

J. Path. and Bact.—Journal (The) of Pathology and Bacteriology, Cambridge University, 1917, v. 21.

J. pharm. et chim.—Journal de pharmacie et de chimie, Paris, 1917, v. 14, 15, 16.

J. Pharmacol. & Exper. Therap.—Journal of Pharmacology and Experimental Therapeutics, Baltimore, 1917, v. 9, 10.

J. Pharm. Soc. Japan.—Journal of the Pharmaceutical Society of Japan (Yakugakuzasshi), Tokyo, 1917, No. [illegible]

J. Phys. Chem.—Journal (The) of Physical Chemistry, Ithaca, 1917, v. 21.
J. Physiol.—Journal (The) of Physiology, London, 1917, v. 51.
J. physiol. et path. gén.—Journal de physiologie et de pathologie générale, Paris, 1917, v. 17.
J. Proc. Roy. Soc. New South Wales.—Journal and Proceedings of the Royal Society of New South Wales, 1917, v. 51.
J. Roy. Micros. Soc.—Journal of the Royal Microscopical Society, 1917.
J. Roy. Soc. Arts—Journal of the Royal Society of Arts, London, 1917, v. 65.
J. Soc. Chem. Ind.—Journal of the Society of Chemical Industry, London, 1917, v. 36.
J. Trop. Med. & Hyg.—Journal (The) of Tropical Medicine and Hygiene, London, 1917, v. 20.
J. Washington Acad. Sc.—Journal of the Washington Academy of Sciences, 1917, v. 7.
Kolloid-Ztschr.—Kolloid-Zeitschrift, Dresden and Leipzig, 1917, v. 20, Nos. 3, 5.
Lancet (The), London, 1917, v. 192, 193.
Med. Rec.—Medical Record, New York, 1917, v. 91, 92.
Merck's Rep.—Merck's Report, New York, 1917, v. 26.
Meyer Bros. Drug.—Meyer Brothers Druggist, St. Louis, 1917, v. 38.
Midl. Drug.—Midland Druggist and Pharmaceutical Review, Columbus, 1917, v. 51.
Montreal Pharm. J.—Montreal Pharmaceutical Journal, 1917, v. 28.
Mulford's Vet. Bull.—Mulford's Veterinary Bulletin, Philadelphia, 1917, v. 8.
N. A. R. D. J.—Journal (The) of the National Association of Retail Druggists, Chicago, 1917, v. 23, 24, 25.
Nat. Drug Clerk.—National (The) Drug Clerk, Chicago, 1917, v. 5.
Nat. Druggist.—National (The) Druggist, St. Louis, 1917, v. 47.
Nat. Eclect. M. Assoc. Quart.—National (The) Eclectic Medical Association Quarterly, Cincinnati, 1917, v. 9.
Nature, London, 1917, v. 98, 99, 100.
New Idea (The), Detroit, 1917, v. 39.
New Orleans Med. & Surg. J.—New Orleans Medical and Surgical Journal, 1917, v. 69, 70.
New York M. J.—New York Medical Journal, 1917, v. 105, 106.
Norges Apotek. Tidsskr.—Norges Apotekerforenings Tidsskrift, Kristiania, 1917, v. 25, No. 1.
Off. Insp. Maine Agric. Exper. Sta.—Official Inspections, Maine Agricultural Experiment Station, 1917, Nos. 81–85.
Off. Reg. Iowa Pharm. Assoc.—Official Register Iowa Pharmaceutical Association, 1917.
Oil, Paint & Drug Rep.—Oil, Paint and Drug Reporter, New York, 1917, v. 91, 92.
Pacific Pharm.—Pacific (The) Pharmacist, San Francisco, 1917, v. 10, 11.
Pennsylvania Med. J.—Pennsylvania Medical Journal, Athens, 1917, v. 20.
Perf. & Ess. Oil Rec.—Perfumery and Essential Oil Record, London, 1917, v. 8.
Pharm. Era.—Pharmaceutical (The) Era, New York, 1917, v. 50.
Pharm. J.—Pharmaceutical Journal (The), London, 1917, v. 98, 99.
Pharm. Post.—Pharmazeutische Post, Vienna, 1917, v. 50, Nos. 10–11, 20–23, 34–45, 47–51, 56–63.
Pharm. Weekblad.—Pharmaceutisch Weekblad, Amsterdam, 1917, v. 54.
Philippine J. Sc.—Philippine (The) Journal of Science, Manila, 1917, v. 12.
Phil. Mag.—The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science, 1917, v. 33, 34.
Physiol. Abstr.—Physiological Abstracts, London, 1917, v. 2.
Pop. Sci. Monthly.—Popular (The) Science Monthly, 1917, v. 90, 91.
Pract. Drug.—Practical (The) Druggist and Pharmaceutical Review of Reviews, New York, 1917, v. 35.

Practitioner (The), London, 1917, v. 98, 99.

Presse médicale, Paris, 1917, v. 25.

Proc. Am. Drug Mfr. Assoc.—Proceedings of the American Drug Manufacturers Association, 1917.

Proc. Nat. Acad. Sci.—Proceedings of the National Academy of Sciences, Washington, 1917, v. 3.

Proc. N. W. D. A.—Proceedings of the National Wholesale Druggists' Association, New York, 1917.

Proc. Roy. Soc. Lond.—Proceedings of the Royal Society, London, 1917, v. 93, 94.

Proc. Soc. Exper. Biol. & Med.—Proceedings of the Society for Experimental Biology and Medicine, 1917, v. 14.

Proceedings of state pharmaceutical associations:

Proc. Alabama Pharm. Assoc., 1917.
Proc. California Pharm. Assoc., 1917.
Proc. Connecticut Pharm. Assoc., 1917.
Proc. Florida Pharm. Assoc., 1917.
Proc. Georgia Pharm. Assoc., 1917.
Proc. Illinois Pharm. Assoc., 1917.
Proc. Kansas Pharm. Assoc., 1917.
Proc. Kentucky Pharm. Assoc., 1917.
Proc. Louisiana Pharm. Assoc., 1917.
Proc. Maine Pharm. Assoc., 1917.
Proc. Maryland Pharm. Assoc., 1917.
Proc. Michigan Pharm. Assoc., 1917.
Proc. Minnesota Pharm. Assoc., 1917.
Proc. Missouri Pharm. Assoc., 1917.
Proc. Nebraska Pharm. Assoc., 1917.
Proc. New Hampshire Pharm. Assoc., 1917.
Proc. New Jersey Pharm. Assoc., 1917.
Proc. New York Pharm. Assoc., 1917.
Proc. North Carolina Pharm. Assoc., 1917.
Proc. North Dakota Pharm. Assoc., 1917.
Proc. Pennsylvania Pharm. Assoc., 1917.
Proc. South Carolina Pharm. Assoc., 1917.
Proc. South Dakota Pharm. Assoc., 1917.
Proc. Texas Pharm. Assoc., 1917.
Proc. Tri-State Pharm. Assoc. (Mississippi, Arkansas and Tennessee), 1917.
Proc. Utah Pharm. Assoc., 1917.
Proc. Vermont Pharm. Assoc., 1917.
Proc. Washington Pharm. Assoc., 1917.
Proc. Wisconsin Pharm. Assoc., 1917.

Public Health Rep.—Public Health Reports, Washington, 1917, v. 32, Nos. 1-52.

Pure Products, New York, 1917, v. 13.

Repert. Pharm.—Répertoire de Pharmacie, Paris, 1917, v. 28, part 2.

Rep. Connecticut Agric. Exper. Sta.—Report of the Connecticut Agricultural Experiment Station, 1917.

Rep. District of Columbia Health Off.—Report of the Health Officer of the District of Columbia, Washington, 1917.

Rep. Florida Bd. Health.—Twenty-eighth Annual Report of the State Board of Health of Florida, 1917.

Rep. Maine Agric. Exper. Sta.—Thirty-third Annual Report of the Maine Agricultural Experiment Station, 1917.

Rep. Minnesota D. & F. Com.—Sixteenth Biennial Report of the Minnesota State Dairy and Food Commissioner, 1917.

Rep. Missouri Bd. Pharm.—Eighth Annual Report of the Missouri Board of Pharmacy, 1917.

Rep. Missouri F. & D. Com.—Annual Report of the Food and Drug Commissioner to the Governor of the State of Missouri, 1917.

Rep. Nevada Agric. Exp. Sta.—Report of the Nevada Agricultural Experiment Station, 1917.

Rep. New Jersey Bd. Pharm.—Sixteenth Annual Report of the Board of Pharmacy of the State of New Jersey, 1917.

Rep. New Jersey Dept. Health.—Forty-first Annual Report of the Department of Health of the State of New Jersey, 1917.

Rep. North Dakota Bd. Pharm.—Thirty-second Annual Report of the North Dakota State Board of Pharmacy, 1917.

Rep. Pennsylvania Bd. Pharm.—Twenty-ninth Annual Report of the State Pharmaceutical Examining Board of Pennsylvania, Harrisburg, 1917.

Rep. Rhode Island Bd. Pharm. –Forty-seventh Annual Report of the Rhode Island State Board of Pharmacy, Providence, 1917.

Rep. Rhode Island F. & D. Com.—Eighth Annual Report of the Board of Food and Drug Commissioners, Rhode Island, 1917.

Rep. South Carolina Com. Agric. Com. & Ind.—Fourteenth Annual Report of the Commissioner of Agriculture, Commerce, and Industries of the State of South Carolina, Columbia, 1917.

Rep. South Dakota F. & D. Com. -Seventeenth Annual Report of the Food and Drug Commissioner of South Dakota, 1917.

Rep. Tennessee F. & D. Dept. –Annual Report of the Food and Drug Department State of Tennessee, 1917.

Rep. Virginia D. & F. Com.—Quarterly Report of the Dairy and Food Commissioner of Virginia, Richmond, 1917.

Rep. Wyoming D. F. & O. Com.—Thirteenth Annual Report of the Dairy, Food, and Oil Commissioner, 1917.

Retail Druggist, Detroit, 1917, v. 24.

Rev. chim. industrielle.—La revue de chimie industrielle, Paris, 1917, v. 26.

Rev. Farm.—Revista Farmaceutica, Buenos Aires, 1917, v. 60, Nos. 2, 6, 9.

Rocky Mountain Druggist (The), Denver, 1917, v. 31.

Schweiz. Apoth.-Ztg. –Schweizerische Apotheker-Zeitung, Zurich, 1917, v. 55.

Science, New York, 1917, v. 45, 46.

Science Progress, 1917, v. 11, 12.

Sci. Am.—Scientific American, 1917, v. 116, 117.

Sci. Papers Bur. Stand.—Scientific Papers Bureau of Standards, U. S. Department of Commerce, 1917.

Simmons' Spice Mill, New York, 1917, v. 40.

Southern Med. J.—Southern Medical Journal, 1917, v. 10.

Southern Pharm. J.—Southern Pharmaceutical Journal, Dallas, 1917, v. 9, 10.

Spatula (The), Boston, 1917, v. 23, 24.

S. R. A.—Chem. –Service and Regulatory Announcements, United States Department of Agriculture, Bureau of Chemistry, 1917.

Svensk farm. Tidskr.—Svensk farmaceutisk Tidskrift, Stockholm, 1917, v. 21.

Svensk kem. Tidskr.—Svensk kemis Tidskrift, Stockholm, 1917, v. 29.

Tech. Papers Bur. Stand.—Technologic Papers of the Bureau of Standards U. S. Department of Commerce, 1917.

Therap. Gaz.—Therapeutic Gazette, Detroit, 1917, v. 41.

Virginia Pharmacist (The), Richmond, 1917, v. 1, 2.

Western Druggist (The), Chicago, 1917, v. 39.

West. Pennsylvania Ret. Drug.—Western Pennsylvania Retail Druggist, 1917.

Wis. Med. J.—Wisconsin (The) Medical Journal, Milwaukee, 1917, v. 15, 16.

Wyoming Farm Bulletin. University of Wyoming Agricultural College and United States Department of Agriculture cooperating. 1917, v. 6, Nos. 7-12 and v. 7, Nos. 1, 2.

Yearbook of Pharmacy and Transactions of the British Pharmaceutical Conference. London, 1917.

Zentralbl. Biochem. u. Biophys.—Zentralblatt für Biochemie und Biophysik. Berlin, 1917, v. 19, Nos. 1-10.

Ztschr. anal. Chem.—Zeitschrift für analytische Chemie. Wiesbaden, 1917, v. 56, Nos. 1, 2, 3, 6, 7.

Ztschr. angew. Chem.—Zeitschrift für angewandte Chemie. Leipzig, 1917, v. 30, part 1, Nos. 46, 49-52, pt. 2, Nos. 46-96.

Ztschr. anorg. Chem.—Zeitschrift für anorganische und allgemeine Chemie. Leipzig, 1917, v. 99, Nos. 1-4.

2. TITLE ABBREVIATIONS. PHARMACOPŒIAS AND NONOFFICIAL STANDARDS

Ph. Arg. I.—Farmacopea Nacional Argentina, primera edicion, 1898.
Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.
Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.
Ph. Brit. V.—British Pharmacopœia, 1914.
Ph. Chil. I.—Farmacopea Chilena, 1886.
Ph. Dan. VIII.—Pharmacopœia Danica, 1907.
Ph. Fenn. V.—Pharmacopœa Fennica, editio quinta, 1914.
Ph. Fr. V.—Pharmacopée Française, Codex Medicamentarius, 1908.
Ph. Germ. V.—Pharmacopœa Germanica, editio quinta, 1910.
Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.
Ph. Hisp. VII.—Farmacopea oficial Española, septima edicion, 1905.
Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.
Ph. Ital. III.—Farmacopea ufficiale del Regno d'Italia, terza edizione, 1909.
Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).
Ph. Mex. IV.—Farmacopea Mexicana, cuarta edicion, 1904.
Ph. Ndl. IV.—Pharmacopœa Nederlandica, editio quarta, 1905.
Ph. Norv. IV.—Pharmacopœa Norvegica, editio quarta, 1913.
Ph. Rom. III.—Pharmacopœa Romana, editio tertia, 1893.
Ph. Ross. VI.—Pharmacopœia Rossica, sixth edition, 1910.
Ph. Serb. II.—Pharmacopœia Serbica, editio secunda, 1908.
Ph. Suec. IX.—Pharmacopœa Svecica, editio nona, 1908.
Ph. Ven. I.—Farmacopea Venezolana, 1898.
U. S. P. IX.—Pharmacopœia of the United States, 9th Dec. Rev., 1916.
N. F. IV.—The National Formulary of Unofficial Preparations, Baltimore, 1916.
N. N. R.—New and Nonofficial Remedies, Chicago, 1917.
B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA AND ON THE NATIONAL FORMULARY.[1]

I. GENERAL COMMENTS.

1. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUG LAWS.

Alsberg, C. L.: A short report on the progress made by the Bureau of Chemistry in the enforcement of the food and drugs act in its relation to pharmacy.—J. Am. Pharm. Assoc. 1917, v. 6, p. 468–469.

Anon.: In the opinion of the Bureau of Chemistry an article sold under a name recognized in the index, but not appearing in the text, of the United States Pharmacopœia is a drug in the meaning of section 6 of the Federal food and drugs act. Such an article is adulterated under the provisions of the act if it differs from the standard of strength, quality, or purity as determined by tests laid down in the United States Pharmacopœia official at the time of investigation, unless its own standard of strength, quality, or purity is plainly stated upon the bottle or box or other container.—Meyer Bros. Drug., 1916, v. 37, p. 68.

Woodruff, C. M.: A discussion of the evils resulting from permitting various departments of the Government to make rules and regulations for the enforcement of laws. —Proc. Am. Drug Mfg. Assoc., 1917, p. 71–73.

Penick, S. B.: When the Federal food and drugs act became effective, it looked rather dark for the future of the crude drug business; but, as was foreseen by a few, the measure proved very successful from a commercial viewpoint, and the standards of to-day stand as a protection to the merchant wishing to conduct his business upon ethical lines.—J. Am. Pharm. Assoc., 1917, v. 6, p. 697.

Anon.: Under the new plan manufacturers may guarantee their products on the invoice for bill of sale, or by certain other methods; but, according to the food inspection provision which became effective November 1, 1916, they can not make any statement of this nature on the labels of packages of food or drugs which enter interstate or foreign commerce.—Nat. Drug., 1917, v. 47, No. 1, p. 3.

Anon.: Every effort should be made to remove temptation from the men who have an appetite for strong drink, and one tempter to go first should be the label indicating the alcoholic strength of various articles for sale in the drug stores.—Virginia Pharm., 1917, v. 2, p. 81.

---

[1] Manuscript submitted for publication February 3, 1920.

Anon.: The N. A. R. D. has adopted a resolution to the effect that the association reiterate its previously professed stand in favor of an amendment to section 7 of the Federal food and drugs act, which would abolish the iniquitous double standard for official medicines, or for any medication bearing an official title.—Apothecary, 1917, v. 29, No. 11, p. 44.

Editorial: It is stated that the formula-disclosure law recently enacted in the Philippine Islands has given rise to the wholesale counterfeiting of many standard patent and proprietary remedies.—Nat. Drug., 1917, v. 47, No. 1, p. 4.

Woodruff, C. M.: Objection is raised to the provisions of H. R. 15914, as they give the Secretary of Agriculture complete control of the preparation of viruses, serums, toxins, and analogous products intended for use in the treatment of domestic animals, leaving the producer no practical remedy against arbitrary, unjust, and malicious action.—Proc. Am. Drug Mfg. Assoc., 1917, p. 76.

2. SALE AND USE OF POISONS

Woodruff, C. M.: The National Drug Trade Conference at a recent meeting adopted a resolution unanimously indorsing the Kern-Doremus bill as the one adequate measure to give relief to art, industry, and science respecting the mailing of legitimate articles which, though poisonous or containing poisons, are not outwardly or of their own force dangerous to life, health, and property, and may be mailed with entire safety.—Proc. Am. Drug Mfg. Assoc., 1917, p. 74; Oil, Paint & Drug Rep., 1917, v. 91, No. 4, p. 17.

Editorial: For a long time past it has been felt that a Federal poison law is needed. Such a law would not alone serve as a model to determine what is a poison, but would, if based on authentic information bearing on the existing use and abuse of poisonous drugs, be an incentive for strict adherence to the provisions of the act, at least in connection with articles offered for interstate commerce.—Pract. Drug., 1917, v. 35, No. 9, p. 18; Merck's Rep., 1917, v. 26, p. 172.

Anon.: A review of a brochure by C. Crinon on the recent laws regulating the sale of poisonous substances in France.—J. pharm. et chim., 1917, v. 16, p. 191.

Editorial: The attention of the retail drug trade is directed to a letter received from the New York Society for the Prevention of Vice. The letter is in the nature of a warning to retail druggists to discontinue in the future to sell articles for the prevention of conception and all preparations or drugs for causing unlawful abortions.—Am. Druggist, 1917, v. 65, No. 8, p. 24.

Kuhn, Charles F.: A discussion of the druggists' status in relation to regulating and dispensing emmenagogues and remedies for venereal diseases.—J. Am. Pharm. Assoc., 1917, v. 6, p. 532–535.

3. SALE AND USE OF NARCOTIC DRUGS.

Anon.: Text of the internal revenue tax draft to control the manufacture and sale of narcotic drugs in the United States.—Oil, Paint & Drug Rep., 1917, v. 91, No. 11, p. 17.

Editorial: Since the enactment of the so-called Harrison law the responsibility for controlling the sale of narcotics has been largely left with the Federal officers. States which were formerly active in apprehending violators have apparently assumed that their duties in this regard are ended. Perhaps this view would be justified if the Harrison law met all of the requirements, but in its present form adequate control is hardly possible without the individual aid of each State.—Virginia Pharm., 1917, v. 1, p. 86.

Editorial: The evidence presented at the hearings held by the New York State Narcotic Committee seems to establish the fact that the narcotic evil is spreading, notwithstanding the satisfactory results which have been derived from the enforcement of the Harrison antinarcotic law and the Boylan Act of the State.—Pharm. Era, 1917, v. 50, p. 2.

Editorial: The main cause of the spread of illicit drug distribution in the State of New York, following the strict regulation of legal distribution by the Harrison antinarcotic law, was found to be the constant demand from the addict, cut off by law from his necessary supply of narcotics.—Oil, Paint & Drug Rep. 1917, v. 91, No. 20, p. 13; see also p. 18.

Editorial: Any effective regulation of the traffic in narcotic drugs must be dual, in that it must be participated in by both the Nation and the States as individual governmental entities. The regulation of sale under the State laws must be strict enough to control completely the illicit distributor and do away with the itinerant peddler, even though it may call for the enactment of legislation making the illicit sale of such drugs a felony instead of a misdemeanor.—Oil, Paint & Drug Rep. 1917, v. 91, No. 1, p. 13.

Editorial: At the hearings of the legislative committee held in New York City, Syracuse, and Buffalo on the narcotic evil. the evidence presented showed conclusively that only a small portion of the drugs used for illegitimate purposes passed through the hands of the retail drug trade.—Am. Druggist, 1917, v. 65, No. 1, p. 22.

Editorial: As the Harrison law has been found wanting in several instances, it should be amended so that it may be as effective as possible within the confines of the Federal Constitution.—Apothecary, 1917, v. 14, No. 1, p. 10.

Lynn, Charles J.: It is recommended that the National Drug Trade Conference take up the matter of drafting a model State narcotic law which will fully supplement the Federal law, so that our laws on the subject, both Federal and State, may be uniform.—Proc. Am. Drug Mfg. Assoc. 1917, p. 78.

Woods, Arthur: The only possible way to stamp out the illicit trade in narcotics is through some sort of Federal legislation that will control the manufacture, sale, importation, exportation, and distribution of all habit-forming drugs.—Oil, Paint & Drug Rep. 1917, v. 92, No. 20, p. 21.

Towns, Charles B.: The responsibility for the use of habit-forming drugs should be put squarely up to the physician. The physician ought to be held to strict accountability for every drug he prescribes and administers. It is not right that the sick should be either imposed upon by the mercenary doctor or unnecessarily exposed to the dangers in the taking of such drugs when prescribed by the conscientious but ill-advised medical practitioner.—Pharm. Era. 1917, v. 50, p. 14.

Wood, Horatio C.: In a discussion of some of the results of the Harrison antinarcotic law, the author states that at present the greatest gains against the illegitimate use of narcotic drugs can be made through proper legislation. It is also stated that, although some 19 or 20 States have antinarcotic laws harmonizing more or less closely with the Harrison Act, there is need not only for prohibitive legislation in the remaining States but also for amendments to stop up the holes which clever rogues have found.—J. Am. Pharm. Assoc. 1916, v. 5, p. 1205-1208.

Anon.: A reprint of the principal features of a Federal taxing measure prepared for the control of traffic in narcotic drugs intended to meet the exigencies caused by the Supreme Court invalidation of the punitive clause in the Harrison antinarcotic act.—Drug Circ. 1917, v. 61, p. 222.

Anon.: The failure of the Harrison law to provide for the keeping of a record of the importation of narcotic drugs into this country has been suggested as one of the probable weaknesses of that measure, and demands for an amendment covering this point were made by the National Drug Trade Conference at its recent convention in Washington City.—Drug. Circ. 1917, v. 61, p. 59.

Anon.: At the 1917 annual meeting of the American Drug Manufacturers' Association, it was urged that the National Drug Trade Conference call a meeting of delegates from all organized agencies interested, including Government officials, to determine what amendments are necessary to strengthen the Harrison Act.—Bull. Pharm. 1917, v. 31, p. 90.

Anon.: That the ultimate solution of the stupendous problem of the illicit distribution of narcotic drugs may require that all habit-forming drugs shall be manufactured or distributed by the Federal Government are findings of the New York Society for the Prevention of Crime, as stated in the annual report of the superintendent.—Oil, Paint & Drug Rep. 1917, v. 91, No. 5, p. 16.

Anon.: The N. A. R. D. has adopted a resolution to the effect that this association oppose any and all propositions to amend the Harrison Act until such time as the necessity for any change has been clearly proven.—Apothecary, 1917, v. 29, No. 11, p. 44.

Anon.: In a short discussion of the deficiencies of our present narcotic laws, it is stated that the strict control of traffic in narcotic drugs is a matter of State, Federal, and international law; not State alone.—Drug. Circ. 1917, v. 61, p. 171.

Anon.: What are known as underground channels account for the distribution of most of the narcotics illegally sold.—Meyer Bros. Drug. 1917, v. 38, p. 145.

Towns, Charles B.: The drug habit may be established just as easily by taking paregoric daily, as by taking morphine straight by the mouth in small quantities; yet at the present time druggists have a perfect legal right to sell this preparation without a prescription in any quantity they may see fit.—Pharm. Era, 1917, v. 50, p. 14.

Anon.: The great danger in the use of habit-forming drugs makes it important that a law be enacted forbidding the manufacture and sale of any patent medicine containing opium or any of its derivatives or preparations. –Rep. Rhode Island Bd. Pharm. 1917, p. 5.

Anon.: The American Association of Pharmaceutical Chemists at its annual meeting passed a resolution discouraging the use of heroin in medicinal preparations which may tend to encourage drug addiction.—Oil, Paint & Drug Rep. 1917, v. 91, No. 26, p. 17.

Collins, C. F.: The narcotic drug situation. A study of the cases in the courts of special sessions of New York during three months showed the following: Heroin cases, 258; opium cases, 110; morphine cases, 29; cocaine cases, 27.—Apothecary, 1917, v. 14, No. 2, p. 22.

Anon.: A bill recently introduced by United States Senator Phelan would amend the Harrison law making the possession of narcotics prima facie evidence of guilt.—Oil, Paint & Drug Rep. 1917, v. 91, No. 20, p. 19.

Anon.: A short synopsis of the Whitney narcotic law recently passed by the Legislature of the State of New York.—Drug. Circ. 1917, v. 61, p. 225–226.

Anon.: A synopsis of a new antinarcotic bill recently introduced in the Pennsylvania Legislature.—Drug. Circ. 1917, v. 61, p. 151.

Anon.: A royal proclamation, dated December 11, 1916, prohibits the importation of cocaine and opium into England excepting under license.—J. Soc. Chem. Ind. 1917, v. 36, p. 45.

Anon. Changes in the French laws governing the sale and use of narcotics as they apply to the pharmacist.—Bull. Assoc. gén. Syn. pharm. France, 1917, v. 29.

4. SALE AND USE OF HOUSEHOLD REMEDIES

Vetter, James R. There are strong reasons relative to the public welfare which make it proper that regulations covering the sale of drugs and medicines should not be confined to poisons but should be extended to embrace what are known as harmless household remedies.—Meyer Bros. Drug. 1917, v. 38, p. 282.

Lehman, A. J. In an article entitled "The Manufacture of Your Own Preparations" the author gives a number of reasons why the pharmacist should prepare all of the household remedies sold under his own name.—Northwestern Druggist (Tac.), 1917, v. 18, No. 10, p. 23-24.

Newcomb, Edwin L. One of the greatest factors which has encouraged self-medication during recent years is the stocking of homes with medicinal compounds by vendors and peddlers.—Proc. Minnesota Pharm. Assoc. 1917, p. 61-62.

Editorial. The legislation concerning the publishing of quantitative formulas for all proprietaries, now pending in a number of States, is said to be unnecessary and uncalled for.—Bull. Pharm. 1917, v. 31, p. 92-93.

Lascoff, J. A. A discussion of the desirability of the publication of the potent drug content of all ready-made medicines.—J. Am. Pharm. Assoc. 1917, v. 6, p. 356-359.

Beal, J. H. The propaganda of the much-criticized patent medicine manufacturer has been the most effective force in preserving popular faith in the curative powers of medicines.—Bull. Pharm. 1917, v. 31, p. 458.

Gronover, A. Memoranda bearing on the investigation of certain remedies and nostrums.—Chem. Abstr. 1917, v. 11, p. 1256, from Ztschr. Nahr.-Genussm. 1916, v. 31, p. 246-254.

McGee, William F. The great danger in the use of habit-forming drugs makes it imperative that a law be enacted forbidding the manufacture and sale of any patent medicine containing opium or any of its derivatives or preparations.—Rep. Rhode Island Bd. Pharm. 1917, p. 5.

Anon. The law of the Philippine Islands regarding the importation and sale of patent and proprietary medicines, enacted February 27, 1917, and amended March 8, 1917, requires that the quantitative and qualitative formula must appear on the label of the bottle or immediate container unless intended for use exclusively for cosmetic purposes. Furthermore, before any patent or proprietary medicine may be offered for sale it must be analyzed and favorably reported on by the bureau of science.—Oil, Paint & Drug Rep. 1917, v. 92, No. 28, p. 81.

Anon.: Consul Ely E. Palmer, Madrid, and Consul Percival Gassett, Malaga, state that the Spanish sanitary regulations (art. 66, par. 3) prohibit the sale of medicinal preparations of all kinds unless the formula is stated on the containers and labels and is listed in the Spanish pharmacopœia.—Am. Druggist, 1917, v. 65, No. 3, p. 60.

Anon.: Report No. 76 of Foreign and Domestic Commerce, Bureau of Special Consular Reports, entitled "Proprietary Medicine and Ointment Trade in China," gives suggestions on methods of selling and distributing patent medicines in China, a field which has not heretofore been covered by American exporters.—Com. Rep. 1917, No. 79, p. 55.

5. DRUG INSPECTION WORK.

Rusby, H. H.: Report of the committee on quality of drugs of the American Pharmaceutical Association. The reporters note that in consequence of the war many drugs and medicinal products have deteriorated in quality.—J. Am. Pharm. Assoc., 1917, v. 6, p. 307 and 408.

Anon.: A section recently added to article 8 of the Sanitary Code of the city of New York assigns to the New York department of health the duty of looking after the cleanliness of drug stores and the quality and cleanliness of medicines therein.—Oil, Paint & Drug Rep. 1917, v. 91, No. 4, p. 17.

Defelice, Lucas F.: A study of infant foods with respect to their composition and food value.—Rev. Farm. 1917, v. 60, p. 631–657.

Dohme, A. R. L.: Sharp & Dohme report that of 5,406 shipments received from August 15, 1916, to August 15, 1917, only 25 were rejected.—Proc. N. W. D. A. 1917, p. 506.

Dohme, A. R. L.: Powers-Weightmann-Rosengarten Co. report that all their crude material, including cinchona bark, opium, iodine, nux vomica, brimstone, salt, citrus materials and other raw materials, drugs, and chemicals have been found up to the usual standards during the year.—Proc. N. W. D. A. 1917, p. 508.

Anon.: Of 172 samples of crude drugs assayed 147 were above standard and 25 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Barnard, H. E.: Of 212 samples of drugs examined, 11 were rejected, as they did not come up to the standard.—Bull. Indiana Bd. Health, 1917, v. 20, p. 135, 148, 159, 172, 184, 196, 207, and 221.

Casey, F. W.: Of 386 samples of drugs examined, 144 were rejected.—Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16; No. 258–259, p. 18; No. 260–261, p. 33; No. 262–263, p. 13.

Congdon, Leon A.: Of 4,840 samples of drug and medicine examined between 1905 and May 1, 1917, 58.18 per cent were legal and 41.82

were illegal and questionable.—Proc. Kansas Pharm. Assoc. 1917, p. 86.

Eakes, Harry L.: Of 179 samples of drugs examined, 72 were rejected.—Rep. Tennessee F. & D. Dept., 1917, p. 15.

Hortvet, Julius: Of 124 samples of extracts and essential oils examined, 44 were rejected.—Rep. Minnesota D. & F. Com., 1917, p. 53.

Ladd, E. F.: Ninety-four of 310 drug stores inspected in North Dakota during 1917 received a passing grade.—Bull. North Dakota Exper. Sta., F. Dept., 1917, v. 4, p. 439.

Lea, E. J.: Of 226 drugs and pharmaceutical preparations examined, 148 were rejected.—Rep. California Bd. Health, 1917, p. 162.

Paton, M. A.: Of 186 samples of drugs examined, 115 were rejected.—Rep. District of Columbia Health Off., 1917, p. 50-51.

Street, John Phillips: The examination of drug products obtained from the stocks of dispensing physicians showed that 22 of 111 samples of tablets were deficient, and that 8 of 18 samples of solutions were unsatisfactory.—Rep. Conn. Agric. Exper. Sta., 1917, p. 161-191.

Tice, William G.: Of 454 samples of drugs examined, 121 were below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

Todd, A. R.: Of 127 samples of drugs examined, 42 were rejected.—Bull. Michigan D. & F. Dept., 1917, No. 264-267, p. 24.

van der Haar, A. W.: Data are given showing the condition of purity of certain medicinal substances marketed in Holland since the beginning of the war in Europe.—Pharm. Weekblad, 1917, v. 54, p. 256-259.

van Italie, E. L., and Wartmann, W. F.: Analytical data are presented showing the purity of chemicals and medicinal products obtained on the market in Holland during the war.—Pharm. Weekblad, 1917, v. 54, p. 301-304.

6. THE PHARMACOPOEIA AS A LEGAL STANDARD

Anon.: The Secretary of Agriculture does not think it necessary that the status of the new U. S. P. and N. F. be defined by an act of Congress, but holds that the revised editions of these works became effective September 1, 1916, for the purpose of the food and drugs act.—Bull. Pharm., 1917, v. 31, p. 45.

Anon.: A criticism of the Secretary of the Department of Agriculture and others for not introducing a bill into Congress to legalize the ninth edition of the U. S. P.—Am. Perf., 1917, v. 12, p. 5.

Anon.: The National Association of Retail Druggists has adopted a resolution to the effect that the organization use all means at its command in urging the State pharmaceutical associations to take steps at once to perfect the legalization of the new U. S. P. and N. F. and to instruct its legislative committee to endeavor to have Congress recognize the new standards by special act.—Apothecary, 1917, v. 29, No. 11, p. 44.

Editorial: Courts in Ohio and Maine have declared that the new revised edition of the Pharmacopœia is not legalized by the statutes of the respective States, and therefore has no authority.—Bull. Pharm., 1917, v. 31, p. 398.

Anon.: Status of the Pharmacopœia under State and Federal laws. A short review of recent rulings.—Proc. Minnesota Pharm. Assoc., 1917, p. 252–254.

Ballard, C. W.: A brief discussion of the relations of the U. S. P. and N. F. to food standards.—J. Am. Pharm. Assoc., 1917, v. 6, p. 792–797.

Beringer, George M.: The readiness with which the public accepts and the drug trade adapts itself to the legal pronouncements of the Pharmacopœia has been shown by the universal acceptance of the official standard for poison tablets of corrosive sublimate.—Am. J. Pharm., 1917, v. 89, p. 350.

Brown, L. A.: The present revisions of the U. S. P. and N. F. are the first editions to appear since the food and drugs act made them legal standards, hence the numerous changes in assay processes, purity rubrics, etc.—Bull. Kentucky Agric. Exper. Sta., 1917, Feb. 15, p. 1.

7. SUPPLEMENT TO THE PHARMACOPŒIA.

Roller, Emil: It is recommended that a supplement be issued after the Pharmacopœia has been in use for one year in order that the deficiencies discovered therein during this time may be corrected.—D.-A. Apoth.-Ztg., 1917, v. 38, p. 155.

Bollinger, C. H.: It seems reasonable to hope that, if experimental work in preparing the working formulas can be pushed, the supplement to the Pharmacopœia can be made a very important one, and the way will be paved for the efficient handling of the next revision proper.—Proc. Minnesota Pharm. Assoc., 1917, p. 171.

8. UNITED STATES PHARMACOPŒIAL CONVENTION.

Beringer, George M.: Since its origin the representation of the Pharmacopœial Convention has been extended to include the various departments of the Federal service, pharmaceutical societies, and schools of pharmacy,the American Chemical Society, the Association of Official Agricultural Chemists, the Association of State and National Food and Dairy Departments, the National Wholesale Druggists' Association, and the National Dental Association. Representation should be extended to include the homeopathic medical schools and the homeopathic medical societies of proper standing.—Am. J. Pharm., 1917, v. 89, p. 574.

9. GENERAL PRINCIPLES TO BE FOLLOWED IN REVISING THE PHARMACOPŒIA.

Dohme, A. R. L. The principles underlying the revision of the U. S. P., IX were not based upon the real purpose of the book, which is a standard for drugs, chemicals, and medicines of the entire country and all classes of its people. The subcommittee on scope was made up mainly of the highly scientific theoretical class, and only a prolonged struggle prevented the ninth revision from being a book of perhaps a hundred pages.—Proc. N. W. D. A., 1917, p. 502.

10. PUBLICATION AND CONTROL.

Editorial: National legislation should be enacted whereby the Federal Government should have control of the publication of the U. S. P. and N. F., as the Federal printing department is thoroughly equipped for the proper handling of these books and the various unnecessary profits as a result of the system of publication under the present let sublet et al. arrangement would thereby be eliminated.—Nat. Drug Clerk, 1917, v. 5, p. 140.

Anon.: A reprint of a resolution passed by the Wisconsin Pharmaceutical Association in which the desire is expressed that the future revisions of the Pharmacopœia be conducted by the United States Government, with the Convention for the Revision of the U. S. P. as an advisory body.—J. Am. Pharm. Assoc. 1917, v. 6, p. 371.

11. THE PHYSICIAN AND THE PHARMACOPŒIA.

Diner, Jacob. In a discussion of the relation of the physician to the Pharmacopœia, it is stated that, looking at it from the point of view of the therapeutist, chemist, laboratory worker, or general practitioner, the U. S. P. does, can, and should form a part of the armamentarium of the modern physician, and no medical library can be rightfully considered complete without a copy of this work.—Proc. New York Pharm. Assoc. 1917, p. 240-243.

Lascoff, J. Leon. A law should be passed compelling every practicing physician to have a copy of the latest editions of the U. S. P. and N. F. in his or her office, as both works are necessary for correct and intelligent prescribing.—D. A. Apoth. Ztg. 1917, v. 38, p. 65.

[illegible], Horace L. In a discussion on pharmacopœias, pharmacists, and physicians, the author states that the profession of medicine makes little use of the Pharmacopœia. It is the official guide for the pharmacist, and it is the main reliance, so far as it tells of drugs and how their derivatives are to be obtained, but its scope is entirely too limited for the physician. If he wants guides, he finds them in dispensatories and books on materia medica, or the publications of the manufacturing companies.—J. Am. Pharm. Assoc. 1917, v. 6, p. 611.

Marquier, Adolph F.: The busy practitioner finds little time for looking over the U. S. P. or N. F., and if the druggist expects to be allowed to compound his prescriptions he must endeavor to bring to the attention of the practitioner from time to time the preparations official in these two publications that are seasonable products.—Proc. New Jersey Pharm. Assoc. 1917, p. 38.

Anon.: The N. A. R. D. has adopted a resolution to the effect that the organization go on record in favor of a more determined demonstration plan to acquaint the members of the medical profession, as well as the pharmacists of the country, with the official U. S. P. and N. F. preparations, this plan to include a recommendation to all medical colleges to teach this branch of medicine in their curriculum.—Apothecary, 1917, v. 29, No. 11, p. 44.

Anon.: In a review of the volume, Epitome of the Pharmacopœia of the United States and the National Formulary with Comments, prepared under the direction of a committee appointed by the Council on Pharmacy and Chemistry of the American Medical Association, it is stated that the pharmacists can not agree with some of the comments therein intended to aid a discriminating selection of therapeutic agents. The book, however, is thought to be valuable as an instrument for acquainting the physician with the preparations of the U. S. P. and N. F.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 48.

Editorial: As a standard of "the drugs that are," the U. S. P. Revision Committee must be guided by returns from the whole United States, not by the opinions of a few research men. That they have been so guided should serve to popularize the work among physicians at large.—Midl. Drug. 1917, v. 51, p. 8.

12. VALUE OF CRITICISM.

Anon.: A review of Hygienic Laboratory Bulletin No. 105, the tenth in the series of Digest of Comments on the Pharmacopœia and the National Formulary, states that no one should attempt writing on the subject of pharmacopœial or National Formulary preparations without consulting these digests and noting what other persons have previously said on the same subject.—Meyer Bros. Drug. 1916, v. 37, p. 243.

13. COMMITTEE OF REVISION.

Dohme, A. R. L.: The U. S. P. Revision Committee, as it exists to-day, is made up of 50 members. Only five of these members are representatives of the manufacturers. Of the 15 members composing the executive committee, only 2 are representatives of the manufacturers. In consequence, the book as it exists to-day, is to a large extent, theoretical rather than practical in nature, and some of the assay processes contained therein, as well as some of the products themselves would not have appeared in their present form if greater consideration and influence had been allowed the manufacturer.—Proc. Am. Drug Mfg. Assoc. 1917, p. 85.

II. NATURE AND PROGRESS OF REVISION

Beringer, George M.: The U. S. P. is the peer of the various national authorities of this nature and is spoken of abroad as "the mother" of pharmacopoeias. That the American plan of revision is fundamentally sound has been demonstrated by its withstanding the criticisms of nearly a century, and likewise by the success that has attended the plan and the acknowledged standing of the resulting work.—Am. J. Pharm. 1917, v. 89, p. 577.

Anon.: In the past our pharmacopoeias have been prepared principally by professors of pharmacy and chemistry with the coöperation of some physicians. The work of the ninth revision, however, has been performed not only by physicians, teachers, and retail druggists, but also by the scientific departments of leading pharmaceutical and drug and chemical houses. It is felt that the new edition is a great improvement over all other editions in this respect.—Merck's Rep. 1916, v. 25, p. 9–10.

Anon.: There is a general cry for a more expeditious revision of the U. S. Pharmacopoeia.—Meyer Bros. Drug. 1917, v. 38, p. 40.

Dohme, A. R. L.: The method of revision of the U. S. P. IX. was faulty and unrepresentative in two ways—namely, the wholesale manufacturing interests were underrepresented, while the medical profession was too largely represented by the therapeutic nihilists; and the actual revision was done by 15 men, styled the executive committee, instead of the revision committee consisting of 50 members.—Proc. N. W. D. A. 1917, p. 501.

Kilmer, Fred B.: It is suggested that the committee of revision which acted for the Ninth Decennial Revision shall, in advance of the pharmacopoeial convention, meet and assign certain problems connected with the revision of the Pharmacopoeia to such associations and organizations as they can enlist in the work, asking these bodies to coöperate in going over the processes and standards of the ninth revision, giving suggestions for the tenth revision.—Proc. New Jersey Pharm. Assoc. 1917, p. 97; Drug. Circ. 1917, v. 61, p. 584.

Rippetoe, J. R.: It is suggested that there should be created continuous committees to coöperate with the revision committee, as is done by the Official Association of Agricultural Chemists. This association through appointed referees invites members and nonmembers to coöperate in trying out methods of analysis upon standard samples for the purpose of determining the practicability of the methods before making them official.—Drug. Circ. 1917, v. 61, p. 501; J. Am. Pharm. Assoc. 1917, v. 6, p. 46.

Schlintz, H. A.: It is suggested that a loose-leaf system be adopted by the revision committee. This will allow the publication of any addition as soon as adopted and will allow a perpetual revision. Such a system will allow of changes at any time and will keep the work fully revised at all times. It will eliminate waste and the enormous cost of composing, printing, and binding a new book, as has been the habit.—Proc. Wisconsin Pharm. Assoc. 1917, p. 45.

Scoville, Wilbur L.: Much of the fundamental work of pharmacopœial revision must be done by the schools of pharmacy, especially where problems of research are involved. In the past the revision committees did much research of the briefer type, but they were unable to investigate the more fundamental problems.—Am. Druggist, 1917, v. 65, No. 1, p. 25.

Dezani, Serafino: A review of the new U. S. P. lays great stress on the method of revision.—Giorn. farm. chim. 1917, v. 66, p. 237–242, 268–270.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Fuller, H. C.: As a standard for drugs, the U. S. P., IX, is altogether too limited in its scope. Too much space has been devoted to prescribing standards for chemical reagents, food products, and substances which are purely mechanical in their application to pharmacy, while the vast number of very important drugs and chemicals in daily use in medical practice, both in this country and in the lands to which our drugs are exported, have been left out.—J. Am. Pharm. Assoc. 1917, v. 6, p. 72.

Beringer, George M.: As the legal authority of this Nation, the scope of the Pharmacopœia should be so extended and broadened as to supply proper standards for all medicines of known composition or formula that are commonly used by any recognized school or branch of medicine. In order to fulfill its national obligation its pronouncements should be extended to cover the remedies used by the homeopathic school. –Am. J. Pharm. 1917, v. 89, p. 574.

Bollinger, C. H.: It is suggested that the way has been paved for the proper increase of the scope of the Pharmacopœia, without appreciably increasing its bulk. This consists of the introduction of meritorious substitutes wherever desirable.—Proc. Minnesota Pharm. Assoc. 1917, p. 167–168.

Dohme, A. R. L.: Heretofore and now the makers of the U. S. P. have consisted too largely of men of theoretical knowledge, professors of colleges, and too little of men who are in touch with the everyday occurrences and requirements of the pharmacist and physician in this country. The U. S. P. plays too important a part in the workaday world of pharmacy and medicine of to-day to have such men practically determine what should be put in the book and what the standards and methods of preparation should be.—Proc. Am. Drug Mfg. Assoc. 1917, p. 181.

Browder, J. O. The U. S. P. IX. is a guide to the chemist rather than to the druggist. In fact, the wording, style, nomenclature, tables, and lack of explanation presuppose the general knowledge, in specific cases, and intimate knowledge of the chemistry of drugs and medicines which is beyond the depth of the average druggist.—Meyer Bros. Drug. 1917, v. 38, p. 79.

Brown, L. A. An enumeration of the changes in the U. S. P. IX. and N. F. IV., presented chiefly in the form of tables.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 1–39.

Lascoff, J. Leon. The opinion of the majority of the pharmacists is that the Pharmacopoeia should be made as simple as possible in order to encourage the pharmacist to manufacture his preparations instead of purchasing them, as is now done in many cases.—Am. Druggist, 1917, v. 65, No. 5, p. 26.

Raubenheimer, Otto. The sanctioning of the use of substitutes in certain cases is an innovation in Pharmacopoeia making of the twentieth century. A list of substitutions permitted by the U. S. P., IX is given.—J. Am. Pharm. Assoc. 1917, v. 6, p. 59–61.

Maben, Thomas. Notes on the U. S. P. IX, monographs. The lack of attention given the P. I., especially in the case of potent drugs, is criticized.—Chem. & Drug. 1917, v. 89, p. 71–72.

Beringer, George M., jr. A criticism of some of the pharmacopoeial English, with illustrations.—Am. J. Pharm. 1917, v. 89, p. 361–365.

Rippetoe, J. R. Notes on the chemistry of the U. S. P., IX.—Drug. Circ. 1917, v. 61, p. 501–502.

Wood, Horatio C. A review of the U. S. P., IX. with special reference to the new remedies contained therein.—Med. Rec. 1917, v. 92, p. 265–267.

Editorial. A review of Hygienic Laboratory Bulletin No. 107 compares the value of the foregoing work with the English publications, Martindale and Westcott's Extra Pharmacopoeia, Squire's Companion and the British Pharmaceutical Codex.—Lancet, 1917, v. 193, p. 356.

Bougault, J. In a review of the ninth edition of the U. S. P. it is stated that the work is very similar to the French Codex in that the same principles in nomenclature have been observed, the same mode of describing the various items contained therein has been followed, a large number of drugs and medicaments are the same or differ but slightly, and the same care has been exercised in the selection of the tests for identity and purity.—J. pharm. et chim. 1917, v. 15, p. 48–53, 80–86, and 107–118; Farm. Españ. 1917, v. 49, p. 113–114 and 130–131.

2. THE PHARMACOPŒIA AS A TEXTBOOK.

Gidley, W. F.: A discussion of the value of the Pharmacopœia and National Formulary as textbooks in the teaching of pharmacognosy.—J. Am. Pharm. Assoc. 1917, v. 6, p. 809–810.

3. A LIMITED MATERIA MEDICA.

Woodruff, W. J.: In each batch of reports contained in journals and periodicals we notice that more and more pages are given to clamorous enunciations of the infallibility of the U. S. P. and the N. F. There is manifest a growing tendency to insist that these works be recognized as the alpha and omega of therapeutics, and that everything outside of them be outlawed.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 33.

Coleman, Warren: The status of drug therapy is in an unsettled state at the present time. Even the action of strychnine as a cardiovascular stimulant is doubted by some. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 1656.

4. NOMENCLATURE.

Farwell, Oliver Atkins: In a comprehensive discussion of the botanical nomenclature of the U. S. P., IX, it is stated that the authors of this work did not invariably follow either the "Vienna" code or the "American," but either one or the other as it suited their convenience, and in some instances neither.—Drug. Circ. 1917, v. 61, p. 173. For similar comments on the N. F. IV see p. 229–231.

Holmes, E. M.: A criticism of the U. S. P. with reference to the botanical names used therein.—Pharm. J. 1917, v. 33, p. 484.

Friedenberg, O. C., and Davies, W. W.: The opinion is expressed that there has been an indiscreet use of synonyms in the N. F., IV, in some cases which makes the book appear very inconsistent in the eyes of the readers, and thereby will tend to weaken its legal status when it has been accepted by the Government.—J. Am. Pharm. Assoc. 1917, v. 6, p. 481–483.

Beringer, George M.: The custom of physicians in prescription writing not infrequently determines changes in pharmacopœial titles. The changing of the title Fluidextractum Rhamni Purshianæ to Fluidextractum Cascaræ Sagradæ is an example of this kind.—Am. J. Pharm. 1917, v. 89, p. 14.

Brown, L. A.: Both the U. S. P., IX, and N. F., IV, have adopted official abbreviations for the Latin titles of drugs and preparations, as an aid in the writing of prescriptions, and which should be of great assistance to physicians in prescribing drugs possessing long and cumbersome titles. It will also be of service in tending to prevent errors in filling prescriptions calling for ingredients that are often abbreviated in an ambiguous manner.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 37.

Rippetoe, J. R. The abbreviation "Fldext." is awkward to write and not pleasing to the eye. "Flext." is much better.—Drug. Circ. 1917, v. 61, p. 501; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

Roller, Emil. The popular names of preparations are not always recognized by the U. S. P. and the N. F. If they were, Oleum Camphoratum and Tinctura Saponis Mollis would be termed Linimentum Camphorae, etc.—D. A. Apoth. Ztg. 1917, v. 38, p. 31.

Patterson, Austin M., and Curran, Carleton E. An account, with examples, of the principles observed by the authors in their work of indexing organic compounds for the Decennial Index of Chemical Abstracts.—J. Am. Chem. Soc. 1917, v. 39, p. 1623–1638.

Thomas, Arthur W. A plea for reform in the nomenclature used in colloid chemistry.—Science, 1917, v. 47, p. 10–14.

Fajans, K. A paper pointing out the chaotic state of the radioactive nomenclature. It is suggested that, pending an international revision of the nomenclature, the names first used should be employed.—Ztschr. Elektrochem. 1917, v. 23, p. 250–257, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 523.

Kraus, P. The author proposes using the Greek "euodia" as a root word in naming perfumes, e. g., to call the aldehydes odogens, as they contain the odophore group (CHO) to which the auxodic groups (as OCH_3) or miodic groups (as OH) unite.—Chem. Zentralbl. 1916, v. I, p. 1208, through Chem. Abstr. 1917, v. 11, p. 1725.

Anon. A book review calls attention to a new German-English Dictionary for Chemists by Austin M. Patterson.—J. Am. Chem. Soc. 1917, v. 39, p. 1296.

5. DOSES

Anon. A book review of The Stearns Dose Book states that the new work has been revised in accordance with the U. S. P., IX, and the N. F., IV, and that it gives the dosage of over 2,300 drugs and preparations. It also contains tables of solubilities, poisons, and antidotes, and general rules outlining the more common incompatibilities.—Am. Druggist, 1917, v. 65, No. 12, p. 78; Western Druggist (The), 1917, v. 39, No. 12, p. 36.

6. ANTIDOTES

Wilms, J. H. Observations on the value of calcium sulphide as a chemical and clinical antidote for mercuric chloride poisoning. The article includes experimental data and case reports.—J. Lab. & Clin. Med. 1917, v. 2, p. 445–458.

Fantus, B., and Hyatt, E. G. A report of researches to determine the value of phosphate and hypophosphite combinations as antidotes for mercuric chloride poisoning.—J. Lab. & Clin. Med. 1917, v. 2, p. 814–818.

Linhart, G. A.: A method for the preparation of pure sodium phosphite for use as an antidote for mercuric chloride poisoning is described in detail.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 722–725.

Gates, Frederick L., and Meltzer, S. J.: A report on the antagonistic effect of magnesium sulphate against fatal doses of sodium oxalate.—J. Pharmacol. 1917, v. 9, p. 353–354.

Kleiner, I. S., and Meltzer, S. J.: A report on the reduction of the toxicity of strychnine by the administration of large quantities of indifferent fluids.—J. Pharmacol. 1916, v. 9, p. 359.

Shelton, H. P.: A note on the value of apomorphine as an antidote for strychnine poisoning.—Therap. Gaz. 1917, v. 41, p. 456.

Withers, W. A., and Carruth, Frank E.: A report on iron as an antidote for cottonseed meal injury.—J. Biol. Chem. 1917, v. 32, p. 245–257.

7. WEIGHTS AND MEASURES.

Stratton, S. W.: Classified information concerning units of weight and measure, their definitions and tables of equivalents. —Circ. Bur. Stand. 1917, No. 47, p. 1–68.

Ingalls, Walter B.: A paper discussing the question, "Shall Great Britain and America adopt the metric system?"—J. Roy. Soc. Arts, 1917, v. 65, p. 604–610.

King, George C.: A short discussion of how to adopt the metric system.—Pract. Drug. 1917, v. 35, No. 7, p. 28.

Miller, Adolph W.: Report of the special committee of the Northwestern Druggists' Association for the cooperation with the other national bodies in promoting an educational campaign having for its object the ultimate adoption of the metric system as the official standard of weights and measures in this country.—Western Druggist (The), 1917, v. 39, p. 271–274.

Editorial: Many scientific and professional bodies have indorsed the metric system, but the most emphatic step yet taken in its favor is the employment of it to the complete exclusion of the apothecaries' system in the late revision of the U. S. P. and N. F. The adoption of the term mil in the U. S. P. in preference to c. c. is another step toward the permanent and exclusive use of the metric system.—Midl. Drug. 1917, v. 51, p. 134.

Editorial: The U. S. P. has used the metric system to the exclusion of all others through two revisions, and druggists find it very much simpler than either the avoirdupois or apothecaries' weights or the old-fashioned wine measures in general use, and have no desire to change back again to these old units. The same kind of an experience would be had in all other callings should it be required of our people.—Midl. Drug. 1917, v. 51, p. 168.

England, J. W.: A discussion of the metric system in relation to industrial preparedness.—J. Am. Pharm. Assoc. 1917, v. 6, p. 73–74.

Arny, H. V. A lecture on the application of the metric system in everyday life.—J. Am. Pharm. Assoc. 1917, v. 6, p. 254-257.

Anon. At the one hundred and seventieth meeting of the American Association for the Advancement of Science, held at Columbia University December 27, the American Metric Association was formed.—Am. Perf. 1917, v. 11, p. 317.

Anon. A book review calls attention to a pamphlet by D. Charles O'Connor entitled "The Metric System for Druggists."—Drug Circ. 1917, v. 61, p. 209.

Anon. The American Institute of Weights and Measures has been organized in New York City for the purpose of combating the efforts being made to further the adoption of the metric system.—Am. Perf. 1917, v. 12, p. 6.

Dobbin, Leonard. Comments on the use of milliliter in place of cubic centimeter in the Ph. Brit., and on some of the British abbreviations for measures of the metric system.—Pharm. J. 1917, v. 98, p. 234-235.

Brown, L. A. Owing to a slight inaccuracy in the value of a cubic centimeter, as used, the committee of revision decided to use the term mil.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 2.

Guichard, M. Attention is drawn to errors which may be caused in weighing through inequalities of temperature between the two sides of the balance. Data obtained in the measurement of these errors under different conditions are presented.—Bull. soc. chim. France 1917, v. 21, p. 213-215.

Blount, B. Some observations on the limitations of the balance. Six of the best balances were examined by three observers at two different places over a ten months' period, and gave variations of 0.4 to 1.6 milligrams.—J. Chem. Soc. Lond. 1917, v. 111, p. 1035-1039.

Guichard, Marcel. A description of a method for weighing vacuum tubes.—Bull. soc. chim. France 1917, v. 21, p. 215-217.

Weigle, George J. Inspections made during the year 1916 revealed the fact that 20.3 per cent of the glass graduates used in the drug stores of Wisconsin were inaccurate, the inaccuracies being due to improper calibration on the part of the manufacturer. During this same period, 31.7 per cent of the prescription weights tested were found to be inaccurate. The latter condition is due not only to the manufacturer, but in a very large degree to the carelessness of the druggist in cleaning the weights.—Pharm. Era 1917, v. 50, p. 85-86.

Arny, H. V. A short article calling attention to the variation in the capacity of the ordinary teaspoon.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1056-1057.

Delage, Yves. A description of a new system of pharmacological equivalents and therapeutic units, and their application to the writing of prescriptions.—Compt. rend. acad. sc. 1917, v. 164, p. 469-472.

Anon.: A review of the provisions of the weights and measures act passed by Newfoundland in 1916.—Com. Rep. 1917, No. 23, p. 354.

8. OBJECTS AND USES.

Lascoff, J. Leon: Not only should the U. S. P. and N. F. be on the shelves of every pharmacist, but, as a ready reference guide, both should be in the possession of every practicing physician as well.—Am. Druggist, 1917, v. 65, No. 5, p. 25.

9. ADDITIONS AND DELETIONS.

Beringer, George M.: A decision whether an article or formula shall be admitted to, retained in, or deleted from the official list of titles is presumed to be based upon the medical practice of the time and the general or extended use of such medicament. It seems, however, that the decisions on such matters were largely based on personal practice and preferences.—Am. J. Pharm. 1917, v. 89, p. 349.

Brown, L. A.: Of those articles official in the text of the U. S. P., VIII, 243 have been dismissed, while 67 new ones have been introduced into the U. S. P. IX.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 2.

Raubenheimer, Otto: The addition of chemicals to the U. S. P., as well as deletions therefrom, have been governed by two basic principles formulated by the subcommittee on scope—namely, therapeutic usefulness and pharmaceutic necessity.—J. Am. Pharm. Assoc. 1917, v. 6, p. 525.

Dohme, A. R. L.: Too many of the drugs which are still largely used and are giving results to physicians were omitted from the U. S. P., IX. The result is the creation of an increasing number of tentative standards of drugs by the Bureau of Chemistry.—Proc. N. W. D. A. 1917, p. 502.

Diekman, George C.: The deletion of elixir of iron, quinine, and strychnine phosphates from the Pharmacopœia has been severely criticized. Pharmacists have not generally accepted the reason assigned for the deletion of this preparation—namely, that a satisfactory formula could not be devised.—Proc. New York Pharm. Assoc. 1917, p. 96.

Thompson, Leon A.: The deletion of the saturation tables contained in the U. S. P., VIII, is criticized on the ground that they were useful to many pharmacists who were accustomed to prepare some of the common and uncommon chemicals.—Nat. Drug. 1917, v. 47, No. 4, p. 136.

10. PURITY AND STRENGTH.

Anon.: Lack of quality in drugs is the one great factor that is causing pharmacy and medicine irreparable harm, and it is time that the eyes of all druggists were open to the mischief that is being and has been done.—N. A. R. D. J. 1917, v. 23, p. 684.

Scoville, W. L.: Some of the samples of zinc salts examined showed a large amount of metallic impurities.—J. Am. Pharm. Assoc. 1917, v. 6, p. 415.

11. ATOMIC WEIGHTS

Anon.: A table of the international atomic weights for 1917.—J. chim. phys. 1917, v. 15, p. 86; Analyst, 1917, v. 42, p. 1.

Baxter, Gregory P.: The twenty-fourth annual report of the committee on atomic weights. Determinations published during 1916.—J. Am. Chem. Soc. 1917, v. 39, p. 333–341.

Clarke, F. W.: On account of the difficulties of correspondence between its members, the international committee on atomic weights has decided to make no full report for 1918. There are, therefore, no changes in the atomic weight table for 1917.—J. Am. Chem. Soc. 1917, v. 39, p. 2517–2518.

Eiseki, Alois: A paper dealing with fundamental atomic weights. Exceptions to the rule that atomic weights are multiples of the number 0.51 are pointed out.—Ztschr. anorg. Chem. 1916, v. 98, p. 86–96, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 107.

Chwolson, O. D.: A theoretical paper in which the author considers how near the atomic weights of the elements approach to some multiple of 4 (atomic weight of helium).—J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 27, from Bull. Acad. Imp. Sci. Petrograd, 1915, p. 1841–1852.

Stewart, John Q.: A discussion of the relation of atomic weights to atomic numbers, and a suggested structure of atomic nuclei.—Science, 1917, v. 46, p. 568–569.

Durrant, Reginald G.: A mathematical paper discussing the numerical relation of atomic weights to atomic numbers.—J. Am. Chem. Soc. 1917, v. 39, p. 621–626.

Hemmet, L.: It is proposed that the rounded-off values of the atomic weights given by Guye, which in almost all cases are within the limits of possible error of determination, should be used in all general chemical calculations.—J. chim. phys. 1917, v. 15, p. 540–548.

Guye, Ph. A., and Moles, E.: A further consideration of the errors involved in the accurate determination of atomic weights, in which attention is directed to surface actions as a source of error in weighing.—J. chim. phys. 1917, v. 15, p. 360–404 and 405–432.

Guichard, Marcel: A general criticism of the methods used for determining atomic weights. Three conditions for such methods are stated.—Bull. soc. chim. France, 1917, v. 21, p. 238–241.

[illegible], C. W.: A note on the determination of atomic weights by means of X-rays.—Science, 1917, v. 47, p. 123–124.

Moles, E.: A review of the work done on the revision of atomic weights during the year 1916.—J. chim. phys. 1917, v. 15, p. 451–469.

Stähler, Arthur, and Tesch, Bruno: A new determination of the atomic weight of tellurium gave the value 127.513 ± 0.003.—Ztschr. anorg. Chem. 1916, v. 98, p. 1–26, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 202.

Reiman, Clarence K.: Revision of the atomic weight of bromine. Determination of the normal density of hydrogen bromide gas.—J. chim. phys. 1917, v. 15, p. 293–333; see also Wallace J. Murray, J. chim. phys. 1915, v. 15, p. 334–359.

Guye, P. A.: Three sources of error, showing the necessity of making a new correction in the atomic weight of silver, are pointed out.—J. chim. phys. 1917, v. 15, p. 549–560.

Moles, E.: Further evidence in support of Guye's view, that the revision of the atomic weights of carbon and sulphur proposed for 1916 by the international committee are premature and not justified, are presented.—J. chim. phys. 1917, v. 15, p. 51–59.

Baxter, G. P., and Grose, M. R.: A report of the revision of the atomic weight of zinc by the electrolytic determination of zinc in zinc bromide. The number found was 65.388.—Chem. News, 1917, v. 115, p. 6–8.

Honigschmid, Otto, and Horovitz, Stefanie: A revision of the atomic weight of thorium based on the analysis of thorium bromide.—Chem. Abstr. 1917, v. 11, p. 1581.

Sears, George W.: A study of tantalum chloride with reference to its use in the determination of the atomic weight of tantalum.—J. Am. Chem. Soc. 1917, v. 39, p. 1582–1587.

Stewart, O. J., and James, C.: From 17 determinations made of the ratio $SaCl_3$:3Ag, using the pure materials, the atomic weight of samarium was found to be 150.44.—J. Am. Chem. Soc. 1917, v. 39, p. 2605–2613.

Venable, F. P., and Bell, J. M.: A report of researches dealing with the atomic weight of zirconium.—J. Am. Chem. Soc. 1917, v. 39, p. 1598–1608.

3. NONPHARMACOPŒIAL STANDARDS.

1. NATIONAL FORMULARY.

Brown, L. A.: The National Formulary contains drugs and formulas, more or less extensively used by the medical profession, but which are not of sufficient importance to be included in the U. S. P. The N. F. is recognized by the Federal and State food and drugs acts as a legal standard; therefore, in the revision, it was necessary to establish standards and provide assay methods in a great many instances.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 23.

Editorial: The N. F. is now practically a secondary list for the U. S. P., including such drugs as aletris, asclepias, castanea, conium, dulcamara, leptandra, quinidine, scoparius, and xanthoxylum, all drugs that "went down" in the opinion of thousands of estimable medical practitioners. The N. F. is no longer a mere list of elixirs, etc., designed to imitate more or less permanent proprietary products. Within its bounds the new N. F. is just as scientific and discriminating as is the new U. S. P.—Midl. Drug. 1917, v. 51, p. 8.

Hemm, Francis: Notes on the history of the N. F. revision and on some of the new preparations in the N. F. IV.—Proc. Missouri Pharm. Assoc. 1917, p. 128–135.

Editorial: Since the printing of the fourth revision of the National Formulary a number of errors have been reported. These have been corrected in a later printing. Ten of these corrections concern changes in formulas; 11 are changes in titles; 29 are changes in synonyms; 20 are changes in abbreviations; and 5 are miscellaneous changes.—Am. Druggist 1917, v. 65, No. 12, p. 24.

Fuller, H. C.: From a study of the new edition the author concludes that the N. F. IV is a more tolerant standard than the U. S. P. IX.—J. Am. Pharm. Assoc. 1917, v. 6, p. 69.

Rusby, H. H.: As the profits from the publication of the N. F. can not go into the general treasury of the A. Ph. A., but must be used by the committee on the N. F., there can no longer be any excuse for the continuation of this publication by the association. It ought to be published by the U. S. Pharmacopoeia Revision Committee.—Pract. Drug. 1917, v. 35, No. 3, p. 28.

Searcy, J. A.: A comparison of the relative values of the National Formulary and Pharmacopoeia to the pharmacist.—Proc. Kansas Pharm. Assoc. 1917, p. 74–75.

Smith, F. A. Upsher: For some time the National Formulary has been winning its way into favor, and a tendency has developed to eliminate to a large degree from the Pharmacopoeia compound medicines of an extemporaneous character. In this way the National Formulary has become the repository for the formulas of many such medicines.—Proc. Minnesota Pharm. Assoc. 1917, p. 172–174.

O'Connor, D. Charles: A short digest of the N. F. IV.—Spatula 1917, v. 23, p. 539–544.

RECIPE BOOK

Gathercoal, E. N.: In a discussion of the Am. Pharm. Assoc. Recipe Book, Dr. Bernard Fantus states that you can vouch for the ingredients of any preparation, but that you can not vouch for the therapeutic or curative effect. He therefore suggests that it would be advisable to exclude from the Recipe Book all titles suggesting medicinal use.—Midl. Drug. 1917, v. 51, p. 4.

Hoffman, C. Elbert: In a thesis on the methods of preparation and means of dispensing topical applications for the treatment of diseases of the eye, a number of formulas for eye remedies is given.—Am. J. Pharm. 1917, v. 89, p. 296–306.

Hoffman, George N.: Practical formulas for the preparation of a number of adhesives are given in detail.—Drug. Circ. 1917, v. 61, p. 184.

Anon.: A list of formulas for the A. Ph. A. book of formulas.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 19.

Anon.: A list of formulas proposed for the A. Ph. A. Recipe Book.—J. Am. Pharm. Assoc. 1917, v. 6, p. 78–82, 194–197, 298–301, 393–396, 486–489, 563–566, 643–646, 729–732, 823–826.

Anon.: A number of formulas for the preparation of cough candies is given.—Am. Druggist, 1917, v. 65, No. 1, p. 40.

Thomas, George E., and Alexander, A.: A discussion of a number of formulas for the manufacture of modern dentrifices.—Am. Perf. 1917, v. 12, p. 7–8, 43.

Anon.: A list of formulas for a variety of preparations.—Canadian Pharm. J. 1917, v. 50, p. 250, 278, 358, 406, 505, 544.

Anon.: A book review of *Pharmaceutical Formulas* by Peter MacEwan states that many new formulas are incorporated in the new edition, especially of preparations which are "admitted and approved remedies" in the sense of the medicine stamp act of Great Britain.—Am. Perf. 1917, v. 12, p. 206.

Anon.: A list of formulas for a variety of preparations.—Am. Druggist, 1917, v. 65, No. 1, p. 38–39; No. 2, p. 39–40; No. 3, p. 38–40; No. 4, p. 39–40; No. 5, p. 39; No. 6, p. 38–39; No. 7, p. 32; No. 9 p. 37; N. 11, p. 40–41; No. 12, p. 37–38.

3. NEW AND NONOFFICIAL REMEDIES.

Anon.: In a review of a publication by the American Medical Association entitled "New and Nonofficial Remedies, 1917," it is stated that every physician and pharmacist who desires to keep abreast of the times should have a copy of this annual, for in it they will find such recent information as that relating to the preparation of acetylsalicylic acid and the revised Carrel-Dakin solution, as well as many other useful suggestions.—Pharm. Era, 1917, v. 50, p. 156.

Editorial: The American Medical Association considers the newer proprietary preparations of such importance that it prints a new and revised edition of New and Nonofficial Remedies every year, thus producing the most critical and scientific drug standard in existence. It makes no claim to be a therapeutic standard, since the drugs incorporated are simply on a scientific basis and require clinical trial to demonstrate their value. It is surprising how many of them make good and are, later, incorporated in the Pharmacopœia.—Midl. Drug. 1917, v. 51, p. 7.

Thum, John K.: A book review of New and Nonofficial Remedies, 1917, states that for the seeker after proprietary medicinal knowledge the book is a reliable and ready source of information. The present volume like its predecessors is right up to date.—Am. J. Pharm. 1917, v. 89, p. 375.

SYNTHETICS.

Anon.: A book review calls attention to a volume by C. Craveri on the manufacture of organic products used in medicine and introduced during the period 1880–1915.—Giorn. farm. chim. 1917, v. 66, p. 298.

Anon.: An editorial calling attention to the probabilities of the development of biochemical processes for the preparation of synthetic chemicals.—J. Am. M. Assoc. 1917, v. 69, p. 735.

Anon.: The Council on Pharmacy and Chemistry of the American Medical Association announces that they propose to make a study of the quality of American-made synthetics. The council feels that inasmuch as the manufacture of some of the synthetic drugs is to some extent experimental in this country, it is due physicians and the public that they be given the protection which will come from the proposed investigation of the market supply.—Oil, Paint & Drug Rep. 1917, v. 92, No. 11, p. 16; Am. J. Pharm. 1917, v. 89, p. 588.

Anon.: A book review of a volume by Henry V. Arny entitled, *Principles of Pharmacy*, refers to the book as an ideal text for the student in pharmacy and a detailed aid to the pharmaceutical chemist, especially to those who desire to more completely study the recent synthetic products and the great advance made in synthetic chemistry.—Midl. Drug. 1917, v. 51, p. 361.

Eder, R.: An address giving an historical survey of the principal synthetic drugs up to salvarsan. A bibliography is also given.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 494–498, [illegible] and [illegible].

[illegible]: A plea for the exercise of common sense in the use of synthetics.—J. Am. M. Assoc. 1917, v. 69, p. 665.

[illegible], R.: Descriptions of the synthetic medicinal products which appeared in 1915.—Chem. Zentralbl. 1916, v. 87, p. 158 through Chem. Abstr. 1917, v. 11, p. 1879.

Queeny, John F.: An account of the coal tar industry illustrated with a drawing of the coal tar genealogical tree.—Pharm. Era, 1917, v. 50, p. [illegible].

NEW REMEDIES.

[illegible], S. [illegible]: A review of the therapeutic novelties made known in 1915, including the specialities and proprietary remedies. The trade name, curative principle and name of manufacturer are given in most cases. A bibliography of 174 references is appended.—Chem. Ztg. 1916, v. 40, p. 145–147, 167–169, 183–185 through Chem. Abstr. 1917, v. 11, p. 1234.

Mannich, C.: A review of new pharmaceutical specialties and patent medicines.—Ztschr. angew. Chem. 1916, v. 29, p. 285–288 through Chem. Abstr. 1917, v. 11, p. 685.

Mencière, L.: A number of formulas of remedies for use in the treatment of wounds are given.—J. pharm. et chim. 1917, v. 15, p. 52–53.

Messner, J.: A quarterly report on new remedies. Principally a bibliographic review.—Ztschr. angew. Chem. 1916, v. 29, p. 257–261 through Chem. Abstr. 1917, v. 11, p. 684.

Anon.: A list of new proprietary remedies.—Am. Druggist, 1917, v. 65, No. 1, p. 37–38; No. 2, p. 38–39; No. 3, p. 37–38; No. 4, p. 38; No. 6, p. 37–38; No. 7, p. 21; No. 8, p. 32; No. 9, p. 32; No. 11, p. 39; No. 12, p. 32.

Anon.: A descriptive list of new remedies introduced in 1916.—Pharm. Era, 1917, v. 50, p. 141, 155 and 203.

Anon.: Short descriptions of some new proprietary remedies.—Pharm. Ztg. 1917, v. 62, p. 105 through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 173.

Anon.: Short descriptions of a number of recently introduced remedies.—Pharm. Zentralh. 1917, v. 58, p. 116–118 through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 174.

Anon.: A list of new remedies introduced during 1915.—Merck's Rep. 1916, v. 25, p. 25–26.

Anon.: A descriptive list of new remedies introduced during the year 1916.—Merck's Rep. 1917, v. 26, p. 16–17.

Anon.: A list of European proprietary remedies recently placed upon the market.—Drug. Circ. 1917, v. 61, p. 88 and 152.

Anon.: A review of a volume by H. Bocquillon-Limousin entitled *Formulaire des Mèdicaments nouveaux pour 1917*.—Boll. chim.-farm. 1917, v. 56, p. 331.

Fleissig: A book review calls attention to a 402-page volume by E. Merck entitled *Medizinische Spezialpräparate*—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 38.

PATENTS AND TRADE-MARKS.

Anon.: The trading with the enemy act, which has recently become a law, throws open to the public all patents, trade-marks, prints, labels, or copyrights belonging to an enemy or an ally of enemy subject; but provision is made by which such use shall be accounted for to the owner of such patent, etc., through a court proceeding, the adjustment to be made at the conclusion of the war.—Oil, Paint & Drug Rep. 1917, v. 92, No. 15, p. 18.

Anon.: About 20,000 German patents and copyrights controlling medical discoveries are released for American manufacture by the United States Government. Licenses will be issued to American manufacturers and to such firms as have the necessary facilities for production.—Western Druggist (Chic.), 1917, v. 39, p. 268.

Anon.: An editorial discussing patent medicines states that when the Patent Office is used for an extension of the nostrum business, founded on the abuse of patent and trade-mark laws, it becomes a menace to the public health.—J. Am. M. Assoc. 1917, v. 68, p. 1914–1915.

England, J. W. In a discussion of the product protection of chemical compounds, the author states that the determination of patent questions is a technical and scientific matter, and the greatest obstacle in the way of patent reform is the ignorance of the legal fraternity, including both the bench and bar, in the sciences of medicine, pharmacy, and chemistry and the arts, or technical applications of the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 120–122.

Woodruff, Charles M.: In a discussion of the relations of the patent law to chemical and medical discoveries, the author states that, in the name of equal right and common justice, product patents should not be denied inventors in the field of chemistry, medicine, pharmacy, and surgery.—J. Am. Pharm. Assoc. 1917, v. 6, p. 475–480.

Editorial: An argument against the patenting of the process of manufacture alone and in favor of a product patent.—Bull. Pharm. 1917, v. 31, p. 137.

Stewart, F. E.: A discussion of the Paige bill, relating to a proposed revision of the patent law.—J. Am. Pharm. Assoc. 1917, v. 6, p. 122–130.

Stewart, F. W.: A report of the American Pharmaceutical Association Committee on Patent Law Revision.—J. Am. Pharm. Assoc. 1917, v. 6, p. 574–577.

Winters, F. A.: A discussion of the value of trade-mark registration.—Pract. Drug. 1917, v. 35, No. 1, p. 42.

Anon.: The aspirin situation from an advertising viewpoint. A short discussion.—Am. Druggist, 1917, v. 65, No. 4, p. 38.

Anon.: Changes in French laws governing patents and trade marks as they apply to the chemical and pharmaceutical industries.—Bull. Assoc. adm. Syn. pharm. France, 1917, v. 30.

Anon.: Illustrated descriptions of new patents and trade-marks of pharmaceutical interest.—Spatula (Bost.), 1917, v. 23 and 24.

Anon.: A list of trade names registered at the International Bureau for the Protection of Proprietaries during the year 1916.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 211–212.

Anon.: For descriptions of English patents see J. Soc. Chem. Ind. 1917, v. 36.

For Swiss patents and trade marks see Schweiz. Apoth.-Ztg. 1917, v. 55.

CHEMOTHERAPY.

Andreev, N.: A paper dealing with the processes of adsorption in their relation to chemotherapeutics and immunity.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 222–251, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 183.

Akatsu, Seinai, and Noguchi, Hideyo: A study of the drug-fastness of spirochaetes to arsenic, mercury, and iodine compounds in vitro.—J. Exper. M. 1917, v. 25, p. 349–362; see also Seinai Akatsu, p. 363–373.

Belin: Notes on a new form of chemotherapy. The method consists of the injection (subcutaneous, intramuscular, or intravenous) of some oxidizing substance. Potassium permanganate was employed in the experiments.—Compt. rend. acad. sc. 1917, v. 165, p. 1074–1076.

Fourneau, E., and Vulquin: A report of researches on the passage of alkaloids and hypnotics in aqueous solutions through lipoid membranes.—Bull. soc. chim. France, 1917, v. 23, p. 201–206.

Lami, Pio: A discussion dealing with the field of pharmacotherapy and the theory of Langley. –Boll. chim.-farm. 1917, v. 56, p. 457–466.

Pyman, F. L.: An abstract of a lecture on the relation of chemical constitution to physiological action. Lancet, 1917, v. 193, p. 924–925.

Schamberg, J. F., et al.: A study of the chemotherapeutic properties of various organic compounds of mercury.—Am. J. Syphilis, 1917, v. 1, p. 1–41.

Tarugi, N., and Bracci, C.: A discussion of the influence of catalysers in therapeutics.—Boll. chim.-farm. 1917, v. 56, p. 537–540, 557–564.

Gautier, Armand: Notes on the activation of the curative properties of quinine and mercury by means of organometallic compounds of arsenic.—Compt. rend. acad. sc. 1917, v. 164, p. 590–593.

Solis-Cohen, S., et al.: Studies on the protective and curative value of urea hydrochloride, ethylhydrocuprein, and other cinchona derivatives in experimental pneumococcus infections.—J. Infect. Dis. 1917, v. 20, p. 313–332.

Kolmer, John A., et al.: A study of the influence of quinine and urea hydrochloride, ethylhydrocuprein, and other cinchona derivatives on leukocytosis and phagocytosis of pneumococci in vitro.—J. Infect. Dis. 1917, v. 20, p. 333–343.

Frouin, Albert, and Grégoire, R.: A report of results obtained with metallic tin and tin oxide in the treatment of staphlococcic infections.—Compt. rend. acad. sc. 1917, v. 164, p. 794–797.

Kolmer, John A., et al.: Descriptions of methods for determining the trypanocidal activity of substances in vitro and their relation to the chemotherapy of experimental trypanosomiasis. –J. Infect. Dis. 1917 v. 20, p. 10–27.

Kolmer, John A., et al.: The numeric relationship of infection to the chemotherapy of experimental trypanosomiasis.—J. Infect. Dis. 1917, v. 20, p. 35–44.

Kolmer, John A., et al.: Methods for determining the bactericidal action of substances in vitro and their relation to the chemotherapy of bacterial infections.—J. Infect. Dis. 1917, v. 20, p. 293–312.

Izar, Guido: Researches on the chemotherapy of Malta fever. The effects of ethylhydrocuprein and isopropylhydrocuprein and isoamylhydrocuprein were studied.—Chem. Abstr. 1917, v. 11, p. 503.

Proescher, F., Seil, H. A., and Stillians, A. W.: On the action of vanadium with particular reference to the treatment of syphilis.—Am. J. Syphilis 1917, v. 1, p. 347; J. Am. M. Assn. 1917, v. 68, p. 1661.

Lewis, Paul A.: Observations bearing on the possibility of developing an experimental chemotherapy of tuberculosis.—J. H. Hosp. Bull. 1917, v. 28, p. 120–125.

Lewis, Paul A.: A lecture on the development of chemotherapy in the treatment of tuberculosis.—Am. J. M. Sc. 1917, v. 153, p. 625–640.

Lewis, P. A.: The accomplishments of the Henry Phipps Institute with respect to the chemotherapy of tuberculosis.—Am. J. M. Sc. 1917, v. 153, p. 625; J. Am. M. Assn. 1917, v. 68, p. 1660.

Countess v. Linden: An experimental study of the chemotherapy of tuberculosis with copper and methylene blue salts.—Chem. Abstr. 1917, v. 11, p. 501.

Burri, C.: From experiments it is concluded that copper lecithinate exerts no curative action in cutaneous tuberculosis, nor does it cause any perceptible effect in cancer of the skin.—Chem. Abstr. 1917, v. 11, p. 502.

Takenaka, Minoru: Studies in the treatment of experimental tuberculosis in guinea pigs and rabbits by tannin, alone, and in combination with gold chloride and sodium oleate.—J. Infect. Dis. 1917, v. 20, p. 442–456.

RADIOACTIVITY

Anon.: A book review calls attention to a volume by Francis P. Venable entitled, *An Account of Radioactivity*.—Sci. Am. 1917, v. 116, p. [illegible].

Abbe, Robert: A discussion of the proper place for radium in the treatment of cancer.—Med. Rec. 1917, v. 91, p. 931–932.

Barker, H. H.: A discussion on radioactivity and some advances in physical science.—Chem. Abstr. 1917, v. 11, p. 3172.

Berthoud, A.: A review of the progress in radiochemistry for the year 1916.—J. chim. phys. 1917, v. 15, p. 93–95.

Chaudhuri, P. C.: A discussion of certain inquiries into the explanation of [illegible] disintegrations.—Chem. News 1917, v. 116, p. 25–27.

Duncan, Rex: A discussion of radium, its chemical, physical, and therapeutic properties.—Proc. California Pharm. Assoc. 1917, p. 32–40.

Duane, William: Descriptions of methods for preparing and using radioactive substances in the treatment of malignant diseases, and of estimating suitable dosages.—Boston M. & S. J. 1917, v. 177, p. 787–798.

Furber, F. B.: A report on methods for the determination of radioactivity.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 116–119.

Happel, H. E.: A lecture on the radium emanation waters. -Med. Rec. 1917, v. 91, p. 843; J. Am. M. Assoc. 1917, v. 68, p. 1665.

Heise, George W.: Data showing the constancy in the radioactivity of certain Philippine waters.—Philippine J. Sc. 1917, v. 12A, p. 309–311.

Moran, J.: A study of the release of radium emanation from water at different temperatures by the bubbling method.—Chem. Abstr. 1917, v. 11, p. 1084.

Moran, J.: A comparison of radium standard solutions. Chem. Abstr. 1917, v. 11, p. 24–29.

Samuel, E. C.: A general article dealing with radium therapy.—Southern Med. J. 1917, v. 10, p. 490–494.

Walsh, J. W. T.: A discussion of the theory of decay in radioactive luminous compounds.—Proc. Roy. Soc. 1917, v. 93A, p. 550–564.

Pratt, L. S.: A report on the measurements of radioactivity of a specimen of allanite from Maine.—Trans. Am. Inst. Mining Eng. 1917, v. 60, p. 935 through Chem. Abstr. 1918, v. 12, p. 2157.

Hahn, P. D.: Descriptions of six radioactive minerals of South Africa.—South African J. Sci. 1916, v. 12, p. 449–452 through Chem. Abstr. 1917, v. 11, p. 11.

Lachs, H.: Notes on the radioactive decomposition products of potassium and rubidium.—Chem. Abstr. 1917, v. 11, p. 1360.

Saubermann, S.: U. S. patent No. 1,236,213. A process for charging aqueous liquids with radium emanations.—Chem. Abstr, 1917, v. 11, p. 2639.

Baker, T. T.: British patent No. 10,151. Radioactive preparations are made by spraying fused sodium chloride with an aqueous solution of a radioactive material and then dried. -Chem. Abstr. 1917, v. 11, p. 117.

Holding, Arthur F., and Long, William B.: The truth about radioactive therapy in the treatment of malignant growths.—J. Am. M. Assoc. 1917, v. 69, p. 982–984.

Ewing, James: A review of radium therapy in the treatment of cancer.—J. Am. M. Assoc. 1917, v. 68, p. 1238–1247.

Barringer, B. S.: A report on the use of radium in the treatment of carcinoma of the bladder and prostate.—J. Am. M. Assoc. 1917, v. 68, p. 1227–1230.

4. BIOLOGICAL PRODUCTS.

Sayre, L. E.: A discussion of biological products from the point of view of the pharmacist.—J. Am. Pharm. Assoc. 1917, v. 6, p. 861–865.

Fleming, Fred: Notes on the care of biological products in the drugstore.—Proc. California Pharm. Assoc. 1917, p. 71–73.

Phelps, I. K., and Palmer, H. E.: The separation and estimation of butyric acid in biological products.—J. Biol. Chem. 1917, v. 29, p. 199–205.

Phelps, I. I. K., and Palmer, H. E.: An experimental study of the identification and quantitative determination of lactic acid in biological products.—J. Am. Chem. Soc. 1917, v. 39, p. 136–149.

Osborne, Thos. B., et al.: A report of experiments to determine the rôle of vitamines in the diet.—J. Biol. Chem. 1917, v. 31, p. 149–163.

McCollum, E. V., and Pitz, W.: The "vitamine" hypothesis and deficiency diseases.—J. Biol. Chem. 1917, v. 31, p. 229–253.

Williams, Robert R.: Investigations dealing with the chemical nature of the vitamines. III. The structure of the curative modifications of the hydroxypyridines.—J. Biol. Chem. 1917, v. 29, p. 495–520.

Harden, Arthur, and Zilva, Sylvester S.: The authors failed to observe any curative action of either form of 2-hydroxypyridine on polyneuritic pigeons. Similar negative results are also recorded for adenine.—Biochem. J. 1917, v. 11, p. 172–179.

Drummond, Jack C.: Unsuccessful attempts to isolate the water-soluble accessory growth-promoting substances from yeast are described. The water-soluble factor, however, is stated not to be identical with adenine, nucleic acid, or any of the constituents of commercial meat extract.—Biochem. J. 1917, v. 11, p. 255–273.

Cornalba, G.: A discussion of vitamines and the new conception of nutrition.—Boll. chim.-farm. 1917, v. 56, p. 577–580.

Brill, Harvey C.: An investigation of the antineuritic properties of the infusorial earth extract of the hydrolyzed extract of rice polishings.—Philippine J. Sc. 1917, v. 12, p. 199–206.

Seidell, Atherton: Experimental data showing the relative vitamine content of brewer's yeast.—J. Biol. Chem. 1917, v. 29, p. 145–154.

Davis, L.: A comparison of domestic peptones with Witte's product. The best comparison is obtained by quantitative biochemical tests, such as the elaboration of diphtheria and tetanus toxins and the production of indol.—J. Lab. & Clin. Med. 1917, v. 3, p. 75–80.

ENZYMES.

Bailly, O.: The results of researches to determine if ferment reactions follow the law of mass action.—J. pharm. et chim. 1917, v. 16, p. 161–167.

Trier, G.: The chemical nature of enzymes. A review of the literature.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 161–165, 176–179.

Bourquelot, Em.: A study of the influence of glycerol on the activity of invertase. The activity of invertase is weakened by the presence of glycerol.—Compt. rend. acad. sc. 1917, v. 165, p. 567–569.

Falk, K. G.: A discussion of the mode of action of urease and of enzymes in general.—J. Biol. Chem. 1917, v. 28, p. 389–390; see also van Slyke and Cullen, ibid. p. 391.

Fernández, D. Obdulio: A lecture on the nature of the antiferments and their uses in therapeutics.—Farm. Espan. 1917, v. 49, p. 65–68, 81–82.

Woker, Gertrud: A theory of the action of diastase based on the reaction which takes place between formaldehyde and starch.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2311–2318 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 61.

von Kaufmann, Wilhelm: A criticism of Woker's work on which she based her assumption that formaldehyde acts like diastase in the hydrolysis of starch.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 198–202 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 251.

Woker, Gertrud: Polemical. A reply to von Kaufmann and criticism of his experiments relative to the reaction between starch and formaldehyde.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 679–692 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 447.

Sloan, LeRoy, H.: The origin of the proteolytic ferments—a study of the character of certain ferments.—Am. J. Physiol. 1917, v. 42, p. 558–571.

Thatcher, R. W., and Dahlberg, A. C.: A report of experimental researches on the identification of the enzymes in milk and butter.—J. Agric. Research, 1917, v. 11, p. 437–450.

Rockwood, Elbert W.: Ammonium salts of inorganic and organic acids increase the activity of ptyalin. Ammonium oxalate is an exception, having little or no action.—Proc. Am. Soc. Biol. Chem. 1917, p. IX–X.

Fiessinger, Noël and Clogne, René: A report of investigations dealing with lipoidase, a new ferment obtained from the leucocytes of blood and pus.—Compt. rend. acad. sc. 1917, v. 165, p. 730–732.

Frankel, Edward M.: Studies on enzyme action. XV. Factors influencing the proteolytic activity of papain.—J. Biol. Chem. 1917, v. 31, p. 201–215.

Roberts, J. G.: Several lots of papain examined contained no added starch and had a high digestive action. They were of excellent quality.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 88.

Dohme, A. R. L.: Of 16 samples of papain examined, only 3 were found to be unsatisfactory.—Proc. N. W. D. A. 1917, p. 511.

Scoville, W. L.: But 60 per cent of the samples of papain examined were of satisfactory quality. Two lots examined were worthless and three others were of less than half the standard strength.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

White, E. C.: Ten lots of papain examined assayed, inactive, 1 to 2.5, 1 to 5, 1 to 7.5, 1 to 8.4, 1 to 10.5, 1 to 11, 1 to 11.5, 1 to 25.5 and 1 to 50, respectively.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

ORGANOTHERAPY

Marfori, P.: A study of the biological action of the extract of lymphatic glands and their hormone function.—Physiol. Abstr. 1917, v. 2, p. 5-9.

Schmidt, C. L. A.: Studies on the properties and action of tethelin.—J. Lab. & Clin. Med. 1917, v. 2, p. 711-718.

Lamb, R. S.: A report on the use of fibrolysin in the treatment of ocular diseases.—J. Am. M. Assoc. 1917, v. 68, p. 1664 from Arch. of Ophthalmology, New Rochelle, N. Y., 1917, v. 46, p. 233.

Graves, W. P.: A preliminary report on ovarian organotherapy.—J. Am. M. Assoc. 1917, v. 69, p. 701-704.

Happel, H. E.: A report on the therapeutic use of the extract of corpus luteum.—Med. Rec. 1917, v. 91, p. 848-850.

SERUMS AND VACCINES

Wayson, N. E.: A discussion of the prophylactic use of vaccines in the present war.—J. Am. M. Assoc. 1917, v. 69, p. 267-273.

Davis, David J.: A discussion of the possibilities and limitations of vaccine therapy.—J. Am. M. Assoc. 1917, v. 68, p. 159-161.

Dean, H. R.: A lecture on the mechanism of the serum reactions.—Lancet, 1917, v. 1, p. 45-50.

Leake, James P.: A general discussion of the subject of bacterial vaccine therapy.—J. Am. M. Assoc. 1917, v. 69, p. 631-632.

Leary and others: A report of studies of different phases of serum therapy.—Boston M. & S. J. 1917, v. 177, p. 611-627.

McCoy, G. W.: A discussion of the usefulness of serums and vaccines under war conditions.—J. Am. M. Assoc. 1917, v. 68, p. 1401-1403.

Miller, Joseph: An article pointing out the nonspecific character of vaccine therapy.—J. Am. M. Assoc. 1917, v. 69, p. 765-768.

Rhamy, B. W.: An experimental note on methods for the preservation of complement.—J. Am. M. Assoc. 1917, v. 69, p. 973-974.

Tsuneoka, R., and Yotsumiya, T.: A description of a means whereby serum for use in the Wassermann reaction can be shipped over long distances.—Japanese Med. Lit. 1917, v. 2, No. 5, p. 5 through Chem. Abstr. 1918, v. 12, p. 1979.

MacConkey, A. T.: A note on the keeping qualities of therapeutic serums states that diphtheria antitoxin in commerce loses about 10 per cent of its value per annum; antidysentery serum retains its neutralizing power for about one and one-half years; and antiscorpion serum alters little in two years.—Brit. M. J. 1917, v. 1, p. 10–11.

Neal, Josephine B., and Abramson, H. L.: Experimental data showing the comparative value of tricresol and chloroform as preservatives for antimeningitis serum.—J. Am. M. Assoc. 1917, v. 68, p. 1035–1037.

Leake, J. P., and Corbitt, H. B.: A study of the toxicity of phenol, trikresol, other commercial cresols, and glycerin, both alone and with phenol and trikresol, with special reference to their use as preservatives for serums.—Bull. Hyg. Lab. 1917, No. 110, p. 35–45.

Stewart, F. E.: A general article discussing the lack of toxicity of mercuralized serums and the application of these serums to the treatment of syphilis.—New York Med. J. 1917, v. 105, p. 121–123.

Pittenger, Paul S.: A study of the comparative toxicity of mercuralized serum and bichloride of mercury when injected intramuscularly, intravenously, and intraspinally.—New York M. J. 1917, v. 105, p. 161–167.

Roser, C. E.: A review of the literature relative to the toxicity of heterologous and homologous sera.—J. Lab. & Clin. Med. 1917, v. 2, p. 536–551.

Sordelli, A., and Fischer, G.: Experimental data bearing on the toxicity of normal beef serum to guinea pigs, rabbits, and dogs. An abstract.—J. Am. M. Assoc. 1917, v. 69, p. 323.

Rakuzin, M. A., and Flier, G. D.: A report of investigations dealing with the adsorption of toxins and antitoxins by aluminum hydroxide.—J. Russ. Phys.-Chem. Soc. 1916, v. 48, p. 711–716 through J. Soc. Chem. Ind. 1917, v. 36, p. 305.

Homer, Annie: A study of indicators with respect to their use in the colorimetric determination of the hydrogen ion concentration of sera.—Biochem. J. 1917, v. 11, p. 283–291.

Elvove, Elias: A colorimetric method for the estimation of cresol or phenol in serum. The procedure is based upon distillation and the application of Millon's reagent to the distillate.—Bull. Hyg. Lab. 1917, No. 110, p. 25–33.

Weston, Paul G.: A discussion of colorimetric methods for determining cholesterol in serum.—J. Biol. Chem. 1917, v. 28, p. 383–387.

Clock, Ralph O.: An investigation of the comparative value of methods for preparing pollen antigen.—J. Infect. Dis. 1917, v. 21, p. 523–525.

Clock, Ralph O.: Stable pollen antigens. Pollen antigens, prepared by extracting the dry pollen with 66⅔ per cent glycerol and 33⅓ per cent saturated sodium chloride solution, retained their antigenic properties for 14 months when stored in an ice box at 5° C.—J. Infect. Dis. 1917, v. 21, p. 387–391.

Cole, R., and Moore, H. F.: A report of studies made to determine the best method for producing an efficient antipneumococcus serum, and a detailed description of the method.—J. Exper. Med. 1917, v. 26, p. 537–561.

Cunningham, J., et al.: A detailed account of the preparation of cholera and typhoid vaccines on a large scale. Illustrated.—Indian J. Med. Res. 1917, v. 5, p. 1–18 through Chem. Abstr. 1918, v. 12, p. 46.

Homer, Annie: The reaction of sera as a factor in the successful concentration of antitoxic sera by the methods in use at present.—Biochem. J. 1917, v. 11, p. 21–39.

Homer, Annie: Some further observations on the influence of phenol and of cresylic acid on the concentration of antitoxic sera by the Banzhaf (1913) process.—Biochem. J. Lond. 1917, v. 11, p. 277–282.

McCoy, G. W.: Some difficulties and misunderstandings with respect to the standardization of serums and vaccines.—J. Am. M. Assoc. 1917, v. 69, p. 378–381.

Amoss, H. L.: Notes on the standardization and administration of antimeningococcus serum. The examination of commercial serums showed their inferiority. The standardization should be by agglutination at 55° C. for 16 hours and the titer should be 1:400 to 1:1000.—J. Am. M. Assoc. 1917, v. 69, p. 1137–1140.

Gordon, M. H.: A description of a method of extracting the endotoxin of the meningococcus for the purpose of standardizing antimeningococcus serum.—Brit. Med. J. 1917, v. 1, p. 110–111.

McCoy, George W.: The standardization of antityphoid vaccine. An experimental study.—Bull. Hyg. Lab. 1917, No. 110, p. 7–24.

Rabin, A.: A comprehensive paper dealing with various phases of tuberculin therapy.—Rev. Farm. 1917, v. 60, p. 658–681.

Ellis, Henry A., and Gay, H. M.: A report on the treatment of tuberculous eyes by the local application of tuberculin.—Lancet, 1917, v. 193, p. 157–159.

Darbaker, L. K.: A discussion of the different tuberculins, their methods of preparation, standards, and uses.—J. Am. Pharm. Assoc. 1917, v. 6, p. 621–627, 698–704.

Rosenow, Edward C.: Experiments with the production of an antipoliomyelitis serum in horses by inoculation with pleomorphic streptococcus from poliomyelitis.—J. Am. M. Assoc. 1917, v. 69, p. 261–265 and 1074–1075.

Nuzum, J. W.: A report of investigations dealing with the production of antipoliomyelitic serum.—J. Am. M. Assoc. 1917, v. 68, p. 24–27.

Nuzom, John W., and Willy, Ralph G.: Specific serum therapy of epidemic poliomyelitis; a report on 159 cases treated with antipoliomyelitis horse serum.—J. Am. M. Assoc. 1917, v. 69, p. 1247–1254.

Heller, David A.: A comparison of the value of mercurialized serum and salvarsanized serum in the treatment of syphilis of the central nervous system.—Arch. Intern. Med. 1917, v. 19, p. 997–1015.

Bull, Carroll G., and Pritchett, Ida W.: Researches relating to the toxin and antitoxin of, and the protective inoculation against *Bacillus welchii*.—J. Exper. M. 1917, v. 26, p. 119–138 and p. 603–611.

Pentz, J. L. A.: On the use of convalescent serum in the treatment of whooping cough. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 1671.

Luttinger, Paul: Experimental data showing the value of pertussis vaccine as a curative prophylactic agent in whooping cough.—J. Am. M. Assoc. 1917, v. 68, p. 1461–1464.

Coates, George M.: A report of clinical experience with the use of vaccines in diseases of the ear, nose, and throat.—J. Am. M. Assoc. 1917, v. 68, p. 162–166.

BIOLOGICAL METHODS AND TESTS.

Ferry, Newell S.: Notes on the preparation of protein extract for diagnostic cutaneous tests.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 655–657.

Wodehouse, R. P.: A description of a method for the preparation of vegetable proteins for antiphylactic tests.—Boston M. & S. J. 1917, v. 176, p. 467–468.

Clock, R. O.: A study of the method for the preparation of pollen antigen, and a description of a method for preparing antipollen serum for the standardization of pollen antigen.—J. Infec. Dis. 1917, v. 21, p. 391 and 523–525; v. 22, p. 80–82.

Wodehouse, R. P., and Olmsted, J. M. D.: A description of a method for the preparation of animal food proteins for antiphylactic tests.—Boston M. & S. J. 1917, v. 177, p. 85–86.

Hadley, P.: A plea for the standardization of reports on agglutination tests.—J. Immunol. 1917, v. 2, p. 463–467.

Marshall, J. A.: A reply to a criticism of the value of the salivary factor as an aid in the diagnosis of dental caries.—Dental Cosmos, 1916, v. 58, p. 1225–1228. For a further discussion of this subject see abstracts of articles by Wm. J. Gies, Chem. Abstr. 1916, v. 10, p. 1198–1199; R. W. Bunting and Florence H. Wixon, Chem. Abstr. 1917, v. 11, p. 1199.

Hunt, Ernest L., and Mills, Ora M.: Some experiences bearing on the medicolegal value of the precipitin test for human blood.—Boston M. & S. J. 1917, v. 176, p. 48-53.

Walker, R. M.: An explanation of the chemistry of the Wassermann reaction on a colloidal basis.—J. Path. & Bact. 1917, v. 21, p. 267-286.

Williamson, Norman E.: A modification for simplifying the Noguchi complement-fixation test is described.—J. Lab. & Clin. Med. 1916-1917, v. 2, p. 202-203.

Tribondeau, L.: Concerning the preparation of purified lipoid extracts according to Noguchi for Wassermann reactions. Experience has demonstrated that these lipoid extracts are in general more active in equal doses than ordinary alcoholic extracts and that their greater purity is one assurance of specificity.—Compt. rend. soc. biol. 1917, v. 80, p. 579-580.

Stillians, Arthur W.: A mixture of strong positive sera preserved with glycerol, to be titrated with each set of tests, is proposed as a standard for the Wassermann reaction.—Am. J. Syphilis 1917, v. 1, p. 767-771.

Smith, J. W., jr.: From experiments the author concludes that the Wassermann test for syphilis is rendered more exact by the addition of cholesterol to the alcoholic extract used as the antigen.—New York M. J. 1917, v. 106, p. 1031.

Schöbl, Otto, and Monserrat, Carlos: Researches on the substitution of human blood cells by monkey's red corpuscles in performing the complement-fixation test for syphilis.—Philippine J. Sc. 1917, v. 12, sec. B, p. 249-253.

van Saun, Anne I.: Notes on the Wassermann reaction with large amounts of the patient's serum. From the results obtained it is concluded that Kromayer's modification can not be used with safety in the practical examination of a large number of sera.—J. Lab. & Clin. Med. 1917, v. 3, p. 62-64.

Smith, J. W., jr., and MacNeal, W. J.: A comparative study of different antigens and of different temperatures of incubation in the Wassermann test. The authors present the results of Wassermann tests performed under these conditions on 500 identical specimens from 457 patients.—J. Infect. Dis. 1917, v. 21, p. [illegible]

Ruediger, E. H.: Pure glycerol is an ideal preservative for human serum intended for the Wassermann reaction. Serum preserved in this manner kept for more than a year, gave practically the same reactions as when fresh and without preservative.—J. Infect. Dis. 1917, v. 21, p. [illegible]

[illegible]: A study of methods for the preservation of erythrocytes for the Wassermann reaction. Sheep erythrocytes can be preserved satisfactorily for three or four weeks by the formalin method, and for 21 to 25 days by the Rous-Turner method.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 200–202.

Picado, C.: Intravenous injections of colloidal silver affect Wassermann's reaction in certain cases, either by reactivation or by inhibition. They may even cause a positive reaction to be obtained with normal subjects.—Compt. rend. soc. biol. 1917, v. 80, p. 327–328; J. pharm. et. chim. 1917, v. 15, p. 361.

Ottenburg, Reuben: Observations on the reliability of the Wassermann reaction. A study of the sources of error and an attempt to standardize the technique.—Arch. Int. Med. 1917, v. 19, p. 457–492.

Neymann, C. A., and Gager, L. T.: A new method for making Wassermann antigens from normal heart tissues is described.—J. Immunol. 1917, part 2, p. 573–583.

Neill, Mather H.: Observations on the significance of antisheep amboceptor in human serum, with reference to the complement-fixation test for syphilis.—Bull. Hyg. Lab. 1917, No. 110, p. 47–55.

Murgia, E.: From observations it is concluded that the Wassermann reaction is invariably negative in cases of chronic lead poisoning.—Chem. Abstr. 1917, v. 11, p. 502.

Myer, Sarah B.: A description of a complement fixation test for syphilis using human complement.—U. S. Naval Med. Bull. 1917, v. 11, p. 175–177.

Lichty, John A., and Whitcraft, James H.: Notes on the clinical interpretation of the Wassermann test.—Pennsylvania Med. J. 1917, v. 20, p. 252–254.

Hammes, E. M.: A study of the comparative values of the Wassermann, the colloidal gold, and other spinal fluid tests for syphilis.—Am. J. Med. Sci. 1917, v. 154, p. 637.

Gradwohl, R. B. H.: The superiority of the Hecht-Weinberg-Gradwohl test for the diagnosis of syphilis over the Wassermann test in untreated and treated cases.—J. Am. M. Assoc. 1917, v. 68, p. 514–521.

Frattini, B.: After a survey of recent literature it is concluded that, from the point of view of specificity, the proposed modifications of the Wassermann reaction with active serum are not justified.—Riv. crit. clin. med. Firenze, 1917, v. 18, p. 133–134 through Abstr. Bact. 1917, v. 1, p. 371.

Craig, Charles F.: A detailed account of the technique of the complement fixation test for syphilis.—Am. J. Syphilis, 1917, v. 1, p. 802–820.

Cobbett, Louis: A lecture on the mechanism of the Wassermann reaction.—Practitioner, 1917, v. 99, p. 72–84.

Chabanier, H., et al.: A simple and certain technique for the fixation reaction in syphilis. The technique proposed utilizes unheated serum. The results obtained in 300 cases accord with the clinical findings.—Compt. rend. soc. biol. 1917, v. 80, p. 543-545.

Brautenbrenner, J., and Schlesinger, M. J.: Conclusions drawn from a comparative study of different methods of performing the Wassermann reaction.—New York M. J. 1917, v. 106, p. 489-491.

Bolan, P. T., and Lynch, L. A.: A description of a more delicate Wassermann reaction depending on the use of increased quantities of blood serum.—J. Am. M. Assoc. 1917, v. 69, p. 1222-1224.

Bergeron, A., and Jouffry, C.: A note on the reactivation of the Wassermann reaction by means of injections of sulphide of mercury.—Press Medicale, 1917, v. 25, p. 241-242.

Bartlett, C. J., and O'Shansky, A. L.: A modified Wassermann technique based upon the rapid fixation of complement present in human serum.—Am. J. Syphilis, 1917, v. 1, p. 776-787; J. Lab. & Clin. Med. 1917, v. 3, p. 118-126.

Anon. Report of the committee of the Southern Medical Association on uniformity in the Wassermann reaction.—Southern Med. J. 1917, v. 10, p. 110-113.

Rubinstein, M., and Mazot: The serochemical method of Bruck for the diagnosis of syphilis. This method, based upon a differentiation of proteins in the serum of syphilitics, is believed to furnish specific results, and may replace the Wassermann test.—Compt. rend. soc. biol. 1917, v. 80, p. 540-543.

Stillians, A. W.: The Bruck precipitation test for syphilis fails in a considerable percentage of cases of early secondary syphilis. It gives a positive reaction in from 24 to 28 per cent of nonsyphilitics.—J. Am. M. Assoc. 1917, v. 69, p. 2014-2016.

Smith, Curtis E., and Solomon, H. C.: A comparison of Bruck's serochemical test for syphilis with the Wassermann reaction in 400 cases.—Boston M. & S. J. 1917, v. 177, p. 321-324.

Black, J. H., et al. From experiments it is concluded that a colloidal gold reaction typical for syphilis is nearly constant in cases of syphilis of the central nervous system. This reaction is stated to be more delicate than the Wassermann test on the blood and spinal fluid and more reliable than pleocytosis and globulin content.—J. Am. M. Assoc. 1917, v. 69, p. 1855-1859.

Birge, E. G., and Bean, J. R.: From experiments it is concluded that the Gordon mercuric chloride test for the diagnosis of syphilitic infection is erratic and should not be used.—New York M. J. 1917, v. 105, p. 986.

McDonagh, J. E. R.: A description of the carbolic-gelatin or "gel" test for syphilis. Syphilitic sera are distinguished from normal sera by the degree of opacity and the rapidity with which the precipitate forms upon addition of a very small amount of concentrated acetic acid.—Chem. Abstr. 1917, v. 11, p. 1188.

Cutting, J. A.: A description of a mastic test for the spinal fluid in the diagnosis of syphilis of the nervous system.—J. Am. M. Assoc. 1917, v. 68, p. 1810–1811.

Smith, Curtis E., and Lowrey, Lawson G.: A report on the use of the Emmanuel-Cutting mastic test in examining spinal fluid from psychopathic subjects.—Boston M. & S. J. 1917, v. 177, p. 557–559.

Lowrey, Lawson G.: The mastic and potassium permanganate tests applied to the cerebrospinal fluid of the insane.—Boston M. & S. J. 1917, v. 177, p. 115–117.

Stokes, John H.: A report on a luetin reaction in syphilis produced by agar, with a brief consideration of its mechanism.—J. Am. M. Assoc. 1917, v. 68, p. 1092–1095.

Kolmer, John A., et al.: A study of the effect of certain drugs upon skin reactions, with special reference to the luetin test for syphilis.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 401–415.

Cole, H. M., and Paryzek, H. V.: A report on the provocation of the luetin test in nonsyphilitic patients.—J. Am. M. Assoc. 1917, v. 68, p. 1089–1091.

Neustaedter, M., and Banzhaf, E. J.: Complement fixation with a specific antigen in acute poliomyelitis. From experiments it is concluded that an antigen has been found which is properly specific and fixes complement, and is therefore of positive diagnostic value in poliomyelitis.—J. Infec. Dis. 1917, v. 21, p. 515–522.

Felton, Lloyd D., and Maxcy, Kenneth F.: Experimental data relating to the colloidal gold reaction of the cerebrospinal fluid in acute poliomyelitis.—J. Am. M. Assoc. 1917, v. 68, p. 752–756.

Meyer, K. F., and Christiansen, C. R.: Notes on the preparation and properties of the antigen used for the production of the intracutaneous "typhoidin" reaction.—J. Infect. Dis. 1917, v. 20, p. 357–390.

Kilgore, Eugene S.: An analysis of the factors of uncertainty in the cutaneous typhoidin test.—Arch. Int. Med. 1917, v. 19, p. 263–275.

Dreyer, Georges, and Inman, A. C.: The agglutination curve and its importance in the diagnosis of typhoid and paratyphoid fevers in inoculated persons.—Lancet, 1917, v. 192, p. 365–369.

Gay, F. P., and Lamb, A. R.: A report of the findings obtained in the application of the typhoidin test in a group of nurses and physicians. Seventy-five per cent of those who have recovered from typhoid fever gave a positive reaction, and from 75 to 40 per cent of those vaccinated against typhoid also reacted positive.—J. Lab. & Clin. Med. 1917, v. 2, p. 217–220.

Force, John N., and Stevens, Ida M.: A review of recent observations on typhoidin, with further studies.—Arch. Int. Med. 1917, v. 19, p. 440–456.

Garrow, R. P.: Notes on the fallacies of relying solely on agglutination tests for the diagnosis of typhoid fever in antityphoid inoculated individuals.—Lancet, 1917, v. 193, p. 112–116.

Hopp, George A. A review dealing with the diagnostic value of th Schick test for immunity to diphtheria.—Hahnemann Month. 1917 v. 52, p. 355–360.

Wright, Louis T. A study to determine what color changes occu on very dark or black skins with the Schick test and also to determin the degree of natural immunity that the Negro possesses to diphtheria.—J. Infect. Dis. 1917, v. 21, p. 265–268.

Zingher, A. A report of further studies with the Schick test. Th largest number of positive Schick reactions is found in childre between 6 and 18 months of age. A control test with heated toxi is essential in obtaining accurate results.—Arch. Int. Med. 1917 v. 20, p. 392–398.

Boldyreff, W. N. Varying results obtained from time to time wit the Abderhalden reaction in the case of the same individual ar attributed to the "periodic activity" of the digestive apparatu during the periods when digestion is not taking place.—Compt. rend soc. biol. 1917, v. 80, p. 882–884.

Amann, J. Certain alterations in the method for carrying out th Abderhalden reaction are described.—Schweiz. Apoth.-Ztg. 1917 v. 55, p. 510–512.

Amann-Lausanne, J. Descriptions of modifications in the technique of the Abderhalden reaction.—Schweiz. Apoth.-Ztg. 1917 v. 55, p. 510–512.

Craig, Charles F. Researches relating to the complement fixatio test in the diagnosis of tuberculosis.—J. Am. M. Assoc. 1917, v. 68 p. 773–776.

Corper, H. J., and Sweeney, H. C. Complement fixation tests i tuberculosis. A comparison of the autolysate antigen and Miller's bacillary antigen.—J. Am. M. Assoc. 1917, v. 68, p. 1598–1601.

Burns, Newell B., et al. Researches on the application of the complement fixation test to tuberculosis.—J. Am. M. Assoc. 1917, v. 68 p. 1386–1389.

Bronfenbrenner, J. Results obtained with the complement fixation test in tuberculosis, using Besredka's purified antigen are presented.—J. Lab. & Clin. Med. 1917, v. 3, p. 50–55.

Gauvain, H. J. A comparative study of the reactions to human and bovine tuberculin applied by the method of von Pirquet in case of tuberculous disease of the bones and joints.—Lancet 1917, v. 193 p. 519–521.

Schoening, H. W. Experiments with a conglutination test fo glanders indicate that it is a specific complement-fixation reaction and that it should be used in conjunction with the complement fixation and agglutination tests, as no one test is infallible.—J. Agric Research, 1917, v. 11, p. 66–75.

5. ANTISEPTICS AND DISINFECTANTS.

Eicher, B. L.: A description of Dakin's new antiseptic, chemically known as para-toluene-sodium-sulphochloramide.—Am. Druggist, 1917, v. 65, No. 9, p. 29–30.

Bougault, J.: A criticism of the nomenclature of the compounds known as "chloramines." Two series of these compounds are described.—J. pharm. et chim. 1917, v. 16, p. 274–280.

Krauss, Robert B., and Crede, Edward: An improved method for the preparation of dichloramine-T on a large scale is described. The preparation of chlorinated eucalyptol for use as a solvent for dichloramine-T is also described.—J. Am. Chem. Soc. 1917, v. 39, p. 2720–2722.

Eicher, B. L.: A discussion of the uses of chlorazene, n-chloro-p-toluene-sulfonamide.—J. Am. Pharm. Assoc. 1917, v. 6, p. 387–388.

Dakin, H. D., and Dunham, E. K.: A study of the relative germicidal efficiency of antiseptics of the chlorine group and acriflavine and other dyes.—Brit. M. J. 1917, v. 2, p. 641–645.

Dakin, H. D., et al.: A report on the use of dichloramin-T (toluene-parasulphonedichloramin) in the treatment of infected wounds.—J. Am. M. Assoc. 1917, v. 69, p. 27–30.

Dunham, E. K., and Dakin, H. D.: A note on the fate of halazone in the animal body and on the stability of tablets containing it.—Brit. M. J. 1917, v. 2, p. 790–791.

Dunham, E. K.: Observations on the value of the chloramines as nasal antiseptics.—Brit. M. J. 1917, v. 1, p. 865–867.

Sweet, Joshua E.: A report on the value of dichloramine-T in the treatment of the wounds of war.—Brit. M. J. 1917, v. 2, p. 249–250.

Hüssy, P., and Hartmann, M.: U. S. patent No. 1,227,624. Processes for preparing a series of bactericidal derivatives from acridine dyestuffs, which are especially effective against streptococcus and plenitis bacilli, are described.—Chem. Eng. 1917, v. 25, p. 141–142.

Fleming, Alexander: From experimental work upon the action f flavine on blood and pus it is concluded that the theoretical basis or the use of flavine is unsound, and that the substance is not specially adapted to use as an antiseptic for wounds.—Lancet, 1917, . 193, p. 341–345.

Browning, C. H., et al.: Tables showing the relative lethal concentrations, therapeutic coefficients, and antiseptic potencies of flavine and brilliant green.—Brit. M. J. 1917, v. 1, p. 73–78; see also). Liggett, ibid., p. 78–79.

Hewlett, R. T.: A note on the germicidal power of flavine.—Lancet, 1917, v. 193, p. 493–494.

Browning, C. H., et al.: Experimental data showing the antiseptic titer and rate of progress of sterilization with acriflavine, proflavine, and brilliant green.—Brit. M. J. 1917, v. 2, p. 70–75.

Browning, C. H.: Comments on the measure of the potency of antiseptics and their value in the treatment of wounds.—Brit. M. J. 1917, v. 1, p. 177.

Colledge, L., et al.: A report on the treatment of a series of recently inflicted war wounds with "proflavine."—Lancet, 1917, v. 193, p. 676–677.

Webb, C. H. S.: A discussion of the general antiseptic value of brilliant green.—Brit. M. J. 1917, v. 1, p. 870.

Smith, J. L., et al.: A description of a convenient method for the preparation of eusol.—Brit. M. J. 1917, v. 2, p. 586–587.

Schrauth, W., and Schoeller, W.: An investigation of the disinfecting power of complex mercury compounds. III. Mercurated phenols.—Ztschr. Hyg. 1916, v. 82, p. 279–288, through J. Soc. Chem. Ind. 1917, v. 36, p. 564.

Kligler, I. J.: A study of the antiseptic properties of certain organic compounds.—J. Exper. Med. 1918, v. 27, p. 463–478.

Gore-Gillon, G., and Hewlett, R. T.: An article calling attention to the value of acetozone as a general surgical antiseptic.—Brit. M. J. 1917, v. 2, p. 209–210.

Wells, F. M.: A note on flavine, sodium desoxycholate and quinine as a mouth wash.—Brit. M. J. 1917, v. 2, p. 6.

Colin, H.: Experimental data showing the antiseptic properties of nitrous air.—Compt. rend. acad. sc. 1917, v. 165, p. 194–196.

Beattie, J. M., et al.: Experiments with electrolytically produced hypochlorous acid solution as a disinfectant for septic wounds.—Brit. M. J. 1917, v. 1, p. 256–259.

Rosebery, S.: A report on the use of chlorine water in the treatment of infantile diarrhœa.—Brit. M. J. 1917, v. 2, p. 789–790.

Frei, Walter: A discussion of factors influencing the effectiveness of chemical disinfectants.—Helvetica Chim. Acta, 1917, v. 1, p. 52–56.

Bond, C. J.: The hæmagglutinin reaction as a test for the toxicity of various antiseptic reagents. Antiseptic reagents may be divided into two groups—those which agglutinate without destroying red cells and those which hæmolyze red cells without producing agglutination. Phenol is an example of the latter and acriflavine of the former.—Brit. M. J. 1917, No. 2971, p. 751–755.

Walters, A. L.: The specificity of disinfectants and its bearing on their standardization. A criticism of the hygienic laboratory method of determining the value of disinfectants.—Am. J. Public Health, 1917, v. 7, p. 1000–1006.

Hamilton, Herbert C.: Some facts and fallacies in disinfection. A criticism of the phenol coefficient method of grading disinfectants.—Am. J. Public Health, 1917, v. 7, p. 282–287.

Richet, Charles, and Cardot, Henry: A report of investigations to determine the action of different antiseptics. A table showing the amounts in which they are effective is given.—Compt. rend. acad. sc. 1917, v. 165, p. 491–496.

Taylor, Kenneth: An article dealing with the specificity of antiseptics. Data showing the variation of antiseptics in their activity against different bacteria in vitro are given.—Lancet, 1917, v. 1, p. 294–297.

Richet, Charles, et al.: Experimental data relative to the irregular action of antiseptics are presented.—Compt. rend. acad. sc. 1917, v. 164, p. 669–673.

Stark, J. R.: Data showing the germicidal value of the common gynecological douching agents are presented.—J. Lab. & Clin. Med. 1917, v. 3, p. 199–202.

Taylor, Herbert D., and Austin, J. Harold: An investigation of the toxicity of certain widely used antiseptics. The substances injected intraperitoneally into mice and guinea pigs, arranged in the order of their decreasing toxicity, are: Eucalyptol and brilliant green, mercurophen, mercuric chloride, and chloramine-T, dichloramine-T and proflavine, hypochlorite, Dakin's solution, Javelle water and magnesium hypochlorite, iodine and phenol.—J. Exper. Med. 1917, v. 27, p. 635–646.

Bond, C. J.: A study of the influence of antiseptics on the activities of leucocytes and on the healing of wounds.—Brit. M. J. 1917, v. 1, p. 145–148.

4. ANALYTICAL DATA.

Raubenheimer, Otto: Explanatory notes on the chemical monographs and new chemicals in the U. S. P., IX.—J. Am. Pharm. Assoc. 1917, v. 6, p. 524–527.

Lyman, J. A., and Reid, E. E.: Physical and chemical data for use in the identification of organic acids.—J. Am. Chem. Soc. 1917, v. 39, p. 701–711.

Reid, E. E.: Experimental data for use in the identification of organic acids.—J. Am. Chem. Soc. 1917, v. 39, p. 124–136.

Rakuzin, M. A., and Flier, G. D.: Tables showing the density and optical rotation of aqueous solutions of ordinary fat-free egg albumen.—Chem. Abstr. 1917, v. 11, p. 604.

Walker, Percy R., and Smither, F. W.: A record of comparative tests of chemical glassware.—J. Ind. & Eng. Chem. 1917, v. 9, p. 090–1092.

Cauwood, J. D., et al.: A comparison of different types of chemical glassware with respect to their susceptibility to attack by chemical eagents. —J. Soc. Glass. Tech. 1917, v. 1, p. 153–202, through Chem. Abstr. 1918, v. 12, p. 212–213.

Denigès, G.: Notes on some micro reactions of the perchloric ion.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 73–75.

Flessig: A book review calls attention to a publication by J. Springer, Berlin, entitled *Pharmazeutischer Kalender, 1917*.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 14.

Flessig: A book review calls attention to the eleventh edition of the *Apotheker-Kalender*, published by Schallehn and Wollbruck, Magdeburg.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 67.

1. ADULTERATIONS.

Joaquin Mas y Guindal: A discussion of the importance of the subject of adulteration from the pharmacologic and therapeutic standpoints.—Farm. Espan. 1917, v. 49, p. 193–195, 209–212, 225–228.

Kohn-Abrest and Bouligand: Analytical data showing the accidental presence of arsenic in some chemicals and food products examined during 1916.—Ann. chim. analyt. 1917, v. 22, p. 85–94, 107–113, 128–134.

LaWall, Charles H.: A note on the use of *Coriaria myrtifolia* as an adulterant of sweet marjoram.—Pract. Drug. 1917, v. 35, No. 11, p. 28.

Kraemer, Henry: Comments on the use of coriaria as an adulterant of senna and marjoram. Illustrations showing the distinguishing histological characters are given.—Pacific Pharm. 1917, v. 11, p. 13–15.

Scoville, W. L.: The scarcity of potassium salts has led to technical salts being offered for those of medicinal quality. The technical salts usually contain large proportions of chloride and are below the U. S. P. or N. F. standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 415.

2. REAGENTS AND TEST SOLUTIONS.

Rather, J. B.: Referee report on the testing of chemical reagents. The report also includes work on caustic soda, molybdic acid, ethyl ether, and citric acid.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 38–41.

Dover, Mary V., and Marden, J. W.: Results obtained in the comparison of the efficiency of some common desiccants are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 1609–1614.

Fawsitt, C. E., and Fischer, Christian: Experiments with the use of camphor as a solvent in cryoscopy.—J. Roy. Soc. New South Wales, 1917, v. 51, p. 467–472.

Denigès, G.: Notes on the use of sodium perchlorate as a general reagent in microchemistry. The crystalline compounds formed with a number of alkaloids are described.—J. pharm. et chim. 1917, v. 15, p. 322–323; Anal. chim. analyt. 1917, v. 22, p. 103–105.

Anon.: A very sensitive reagent for the solanaceous alkaloids consists of a solution of para-dimethyl-amido-benzaldehyde in a concentrated sulphuric acid to which a little water is added. With a trace of any of the solanaceous alkaloids the reagent gives a reddish-violet color on warming.—Pharmazevtizeski J. 1916, p. 263, through Répert. pharm. 1917, v. 28, part 2, p. 81.

Pépin, G. C.: A communication on the value of Tanret's reagent for the detection of quinine in the urine.—Bull. sc. pharmacol. 1917, v. 24, p. 337–338.

Puente y Sánchez, Carlos: A discussion of the value of picrolonic acid as a reagent for the quantitative determination of the alkaloids in cinchona bark.—Farm. Españ. 1917, v. 49, p. 689–691, 705–706, 721–725.

Sperlich, Adolf: Notes on the use of iodine as a microchemical reagent for tannin, particularly with respect to the distribution of tannin and starch in vegetable tissues.—Ber. deutsch. bot. Gesellsch. 1917, v. 35, p. 69–73, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 400.

Anon.: A note on the application of the Komarowski reaction as a test for the purity of concentrated sulphuric acid intended for use as a reagent in testing wines and spirits.—J. Soc. Chem. Ind. 1917, v. 36, p. 545.

Incze, G.: The use of yellow mercuric oxide is recommended for standardizing acid solutions used in volumetric analysis. It possesses the advantages of being free from water and nonhygroscopic.—Ztschr. anal. Chem. 1917, v. 56, p. 177–191, through Analyst, 1917, v. 42, p. 253.

Kinder, H.: A discussion of the proposal of Brandt to use pure iron oxide, prepared from ferrous oxalate, as a standard in the volumetric estimation of iron in hydrochloric acid solution.—Chem. Zentralbl. 1917, v. 1, p. 817, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 391.

Bruhns, G.: Notes on the use of potassium hydrogen carbonate as an analytical standard.—Chem. Ztg. 1917, v. 41, p. 386–388, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 419.

Tsakalotus, D. E., and Dalmas, D.: A report on the application of an iodotannic acid reagent for the determination of the alkalinity of solutions. The reagent consists of a mixture of 1 cubic centimeter of N/10 iodine and 1 cubic centimeter of N/10 tannin.—Bull. soc. chim. France, 1917, v. 23, p. 391–400.

Mach, F., and Lederle, P.: Notes on the use of titanium chloride in analytical practice.—Landw. Vers. Sta. 1917, v. 90, p. 191–224, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 580–581.

Moir, J.: An account of new applications of thymolphthalein and naptholphthalein in analytical work. An abstract.—Analyst, 1917, v. 42, p. 248.

Palet, Luciano P. J., and Fernandez, Amancio. A note on the use of iodized eosin as a reagent for the investigation of blood spots.—Anales soc. quim. Argentina. 1917, v. 5, p. 119-120.

Palet, Luciano P. J., and Fernandez, Amancio. A study of the various color reagents used in the chemico-legal investigation of blood spots.—Anales soc. quim. Argentina. 1917, v. 5, p. 177-184.

Pittenger, Paul S., and Vanderkleed, C. E. A preliminary note on the value of beta-iminazolylethylamine hydrochloride as a standard for testing pituitary extracts.—J. Am. Pharm. Assoc. 1917, v. 6, p. 131-135.

Plaisance, G. P. Notes on thiobarbituric acid as a qualitative reagent for ketohexose.—J. Biol. Chem. 1917, v. 29, p. 207-208.

Radcliffe, L. G., and Medofski, S. A study of methods for the evaluation of acetic anhydride intended for use as a reagent.—J. Soc. Chem. Ind. 1917, v. 36, p. 628-630.

Sage, C. E. A further note on the evaluation of acetic anhydride.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 162-163.

Rebello-Alves, S., and Benedicenti, A. A note on the use of hematoxylin as a reagent for copper ions and imperfect complexes of copper.—Arch. farmacol. sper. 1917, v. 24, p. 50-57.

Snyder, J. P. Standard ouabain for use in assaying drugs of the digitalis series is practically unobtainable in the United States at the present time, and it is claimed that it is not uniform.—J. Am. Pharm. Assoc. 1917, v. 6, p. 714-715.

Steenbergen, H. D. A note on the degree of purity of sulphuric acid necessary for its suitability as a reagent for the nitrate test. A suitable acid may be obtained by repeatedly shaking with mercury and allowing to stand until free from bubbles.—Chem. Weekblad. 1917, v. 14, p. 647-648.

Tribondeau, L. Notes on Noguchi's purified lipoid extract for use in the Wassermann reaction.—Compt. rend. soc. biol. 1917, v. 80, p. 776-781.

Vivario, R., and Wagenaar, M. Notes on the use of urotropin as a microchemical reagent. Descriptions of crystalline derivatives formed by urotropin with metallic salts with a summary of the literature.—Pharm. Weekblad, 1917, v. 54, p. 157-161.

Guglialmelli, Luis. Arsenotungstic acid reagent for phenols is prepared by dissolving 20 grams of sodium tungstate in 150 cubic centimeters of water, adding 50 grams of pure arsenic trioxide and boiling under a reflux condenser for one hour. The reagent gives a blue color with phenols.—Anales soc. quim. Argentina. 1916, v. 4, p. 116-170.

Guglialmelli, Luis. Arsenotungstomolybdic acid reagent for phenols is prepared by dissolving 70 grams of sodium tungstate and 4 grams of sodium molybdate in 150 cubic centimeters of distilled water, adding 50 grams of pure arsenic trioxide, and boiling for one and one-half hours under a reflux condenser. The reagent gives color reactions with all phenols.—Anales soc. quim. Argentina, 1916, v. 4, p. 183–184.

Schulte, Wilhelm: A reagent for the precipitation of sugars, starches, gums, albumin, and organic acids is prepared by dissolving 30 grams of crystallin basic lead acetate in 86.5 cubic centimeters of water and diluting 6 cubic centimeters of this solution with 26 cubic centimeters of water and 8 cubic centimeters of ammonia water (specific gravity 0.91).—Chem. Ztg. 1917, v. 41, p. 822.

Black, J. H., et al: Minute descriptions of the technique for the preparation of colloidal gold are given.—J. Am. M. Assoc. 1917, v. 69, p. 1855–1859.

Trimble, William K.: A standard method for making uniform colloidal gold solutions is described.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 199–200.

Curtman, L. J., and Freed, M.: Directions for the preparation of a modified Benedict and Hitchcock uric acid standard solution.—J. Biol. Chem. 1917, v. 28, p. 89–92.

Walker, Charles H., and Klein, Frederick: A description of a new substitute for the Fehling solution of the U. S. P.—Am. Med. 1917, v. 23, p. 580–582.

Rosenberg, Louis: A note on the colloid chemistry of Fehling's test.—Science, 1917, v. 46, p. 617.

Pollitz: The addition of a very small quantity of an alkali, such as sodium hydroxide, prevents the bacterial decomposition of starch solution and does not interfere with its use as an indicator in iodometric titrations.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 132 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 499.

Kolthoff, J. M.: A method for the preparation of a permanent starch solution is given. Mercuric iodide is used as a preservative. - Pharm. Ztg. 1917, p. 157, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 421.

Fouchet: Formulas for the extemporaneous preparation of solution of sodium hypobromite and of bromine from bromides.—Répert. pharm. 1917, v. 28, part 2, p. 43–44.

Denigès, G.: Researches to determine the nature of the products which are formed in the preparation of sodium hypobromite using different samples of commercial bromine.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 321–323.

Joachimowitz, Marianne: p-dimethylaminobenzaldehyde dissolved in sulphuric acid is stated to be a good reagent for phloroglucinol, and to give a quicker and more localized reaction than Lindt's reagent.—Biochem. Ztschr. 1917, v. 82, p. 324–358 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 682.

Rinkes, I. J.: Notes on the preparation and uses of Braun's reagent (methanedimethyldihydrazine). The reagent reacts with aldehyde and ketone groups.—Chem. Weekblad. 1917, v. 14, p. 895-896.

Reid, E. E.: Experimental data on the use of p-$O_2NC_6H_4CH_2Br$ in the identification of acids.—J. Am. Chem. Soc. 1917, v. 39, p. 124-136.

Reid, E. E.: Experimental data relative to the use of p-$O_2NC_6H_4$-CH_2Br for the identification of phenols.—J. Am. Chem. Soc. 1917, v. 39, p. 304-309.

B. VOLUMETRIC SOLUTIONS

Miller, C. F.: A description of an accurate method for taking aliquots of a standard in the standardization of solutions.—J. Am. Chem. Soc. 1917, v. 39, p. 2488.

Haynes, W. G.: An illustrated description of an arrangement for handling standard solutions of barium hydrate.—J. Ind. & Eng. Chem. 1917, v. 9, p. 58-59.

Babington, F. W., and Tingle, A.: The standardization of decinormal sulphuric acid. It is recommended that it be compared volumetrically with some acid used as a standard, such as tartaric or salicylic.—J. Soc. Chem. Ind. 1917, v. 36, p. 1203-1204.

Incze: A description of a rapid method for the preparation of carbondioxide-free potassium hydroxide volumetric solution. The solution is prepared by the action of a neutral potassium iodide solution upon mercuric oxide.—Ztschr. anal. Chem. 1917, v. 56, p. 177-191 through Pharm. Weekblad. 1917, v. 54, p. 1356-1357.

Klein, Friedrich: The standardization of normal KOH V. S. by means of oxalic acid or by the sulphuric-acid method of F. Klein is recommended in place of the U. S. P. method.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 52.

C. INDICATORS

White, E. C., and Acree, S. F.: Researches bearing on the quinone-phenolate theory of indicators.—J. Am. Chem. Soc. 1917, v. 39, p. 648-652.

Homer, Annie: A study of indicators with respect to their use in the colorimetric determination of the hydrogen-ion concentration of sera.—Biochem. J. 1917, v. 11, p. 283-291.

Goldberg: A note on the use of p-nitrophenol as an indicator for estimating the acidity of natural waters when these waters are turbid.—Chem.-Ztg. 1917, v. 41, p. 599, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 498.

Dehn, William M., and McBride, Louis: A study of the chromoisomerism of methyl orange.—J. Am. Chem. Soc. 1917, v. 39, p. 1348-1357.

Lehmann, F., and Wolff, G.: From experiments it is concluded that methyl red is more sensitive to hydroxyl ions than is methyl orange, and that it has about the same general value for the titration of bases of all strengths that phenolphthalein has for acids. –Arch. Pharm. 1917, v. 255, p. 113–119, through J. Soc. Chem. Ind. 1917, v. 36, p. 944.

Snyder, J. P.: With practically all alkaloids, methyl red gives results 4 or 5 per cent too low. The end point, however, is much sharper than when using cochineal.—Proc. New York Pharm. Assoc. 1917, p. 226.

Suzuki, S.: A test paper for acids and alkalies is prepared by saturating filter paper with an alcoholic extract of the terminal leaves of *Euphorbia pulcherrima*.—Japanese Med. Lit. 1917, v. 2, No. 6, p. 6–7.

Sacher, J. F.: In the estimation of lead by titration with a solution of ammonium molybdate, the supernatant fluid is turbid so long as the reaction is incomplete, but this turbidity disappears suddenly at the end point. The turbidity is due to colloidal lead molybdate and the coagulation of this serves to indicate the end point. –Kolloid-Ztschr. 1916, v. 19, p. 276–277, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 180.

5. PHYSICAL CONSTANTS.

Jorissen, W. B.: A presentation of data showing the molecular association (computed from their respective boiling points and specific gravities determined at the boiling temperature) of a number of substances.—Chem. Weekblad, 1917, v. 14, p. 1022–1025.

Fawsitt, C. E., and Fischer, Christian: Experiments with the use of cineol as a solvent in cryoscopy.—J. Roy. Soc. New South Wales, 1917, v. 51, p. 467–472.

Lidstone, F. M.: An illustrated description of a mercurial viscometer designed for accurately measuring the viscosity of an oil when a very small quantity is available.—J. Soc. Chem. Ind. 1917, v. 36, p. 270–272.

Somogyi, R.: Tables giving the densities and capillary constants of various alcohols, aldehydes, acids, bases, salts, etc., are presented.—Int. Ztschr. physikal-chem. Biol. 1916, v. 3, p. 60–70 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 124.

SPECIFIC GRAVITY.

Cheneveau, M. C.: An illustrated description of balance for determining densities of fluids.—Chem. Abstr. 1917, v. 11, p. 549.

Dubois, J.: German patent No. 291635. A new apparatus for determining the specific gravity of solids.—Chem. Abstr. 1917, v. 11, p. 1065.

Edwards, Junius D. An illustrated description of a specific gravity balance for gases.—Tech. Papers Bur. Stand. 1917, No. 89.

Hall, Frank. A description of a vacuum-jacketed picnometer for liquids.—J. Am. Chem. Soc. 1917, v. 39, p. 1319-1321.

Neville, Marks. A description of an improved form of picnometer.—J. Am. Chem. Soc. 1917, v. 39, p. 2378-2379.

Rakusin, M. A., and Flier, G. D. Data showing the specific gravity of aqueous solutions of egg albumen are presented.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 458-461 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 232.

Cohenzl, A. Formulas for calculating the volume of a liquid by means of a change in the specific gravity caused by the addition of a known volume of another liquid of known density are given.—Chem. Abstr. 1917, v. 11, p. 183.

SOLUBILITIES.

Johnston, John. A book review calls attention to a volume by Harry C. Jones entitled *The Nature of Solution*.—J. Am. Chem. Soc. 1917, v. 39, p. 2242-2243.

Hartung, E. J. A contribution to the theory of solution.—Chem. News, 1917, v. 116, p. 272-274, 284-286, 310-312.

Dott, D. B. Attention is called to the fact that amorphous condition is an important source of discrepant statements as to the solubility of alkaloidal salts. Several examples illustrating this point are given.—Pharm. J. 1917, v. 99, p. 282.

Hendrixson, W. S. A simple procedure is described for determining solubility in which the solution is stirred by air which has been previously saturated with moisture at the temperature for which it is desired to determine the solubility. This saturation of the water compensates for the usual loss by evaporation when stirring by air under ordinary conditions.—Proc. Iowa Acad. Sci. 1916, v. 23, p. 31-34 through Exper. Sta. Rec. 1917, v. 37, p. 205.

Cavazzi, Alfredo. A note concerning an erroneous opinion generally held with respect to the solubility of calcium carbonate in boiling water.—Gazz. chim. ital. 1917, v. 47, part 2, p. 49-63.

Chiaria. Data are presented showing the solubility of iodoform in glycerin. At 15° C. it is stated to be soluble to the extent of 0.193 per cent.—Giorn. farm. chim. 1917, v. 66, p. 94-96.

Coblentz, Virgil. A presentation of experimental data showing the solubility of pharmaceutical glassware in water and aqueous alkaline or acid solutions.—Proc. New Jersey Pharm. Assoc. 1917, p. 47-50.

Dehn, William M. Comparative solubilities of 85 different substances in water, in pyridine, and in aqueous pyridine.—J. Am. Chem. Soc. 1917, v. 39, p. 1399-1404.

Dehn, William M.: A report of work on the colorimetric determination of the solubilities of helianthin and its salts.—J. Am. Chem. Soc. 1917, v. 39, p. 1377–1381.

Ditz, Hugo, and Kanhäuser, Franz: Data showing the solubility of lead sulphate in highly concentrated and fuming sulphuric acid are given.—Ztschr. anorg. Chem. 1916, v. 98, p. 128–140, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 208.

Hildebrand, Joel H., et al: Data showing the solubilities of anthracene, anthraquinone, p-dibromobenzene, phenanthrene, and iodine in various solvents are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 2301–2302.

Marden, J. W., and Dover, Mary V.: Data showing the solubilities of several substances in mixed nonaqueous solutions.—J. Am. Chem. Soc. 1917, v. 39, p. 1–7.

Lenher, Victor, and Merrill, H. B.: Data showing the solubility of silica in hydrochloric acid of various concentrations, concentrated sulphuric acid, water, and water saturated with carbon dioxide are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 2630–2638.

Noyes, Arthur A., et al.: An investigation of the solubility of bismuth oxychloride in hydrochloric acid, with a discussion of the relation of this phenomenon to complex formation.—J. Am. Chem. Soc. 1917, v. 39, p. 2526–2532.

MELTING-POINT DETERMINATIONS.

Anon.: An illustrated description of a new apparatus for determining the melting point of fats.—Giorn. farm. chim. 1916, v. 4, p. 151–153, through Analyst, 1917, v. 42, p. 29.

Stock, Alfred: The determination of melting points at low temperatures. Two forms of a device are described by means of which the difficulty of determining melting points with a nontransparent bath is overcome.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 156–158, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 192.

Fleissig: A review of methods for the determination of melting points, with special reference to the melting point of paraffin.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 2–4.

Herzog, J.: Notes on the melting-point determinations of fats and fat-containing substances.—Apoth.-Ztg. 1917, p. 189, through Pharm. Weekblad, 1917, v. 54, p. 1426.

Emklaar, C. J.: An investigation of the melting points of some hydrocarbons, in particular of dienes, having a system of conjugate double linking.—Rec. trav. chim. 1917, v. 36, p. 247–249, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 113.

BOILING-POINT DETERMINATIONS.

Jorissen, W. P.: Observations on the relationship of the boiling-point temperature to the critical temperature. Several tables of data are presented.—Chem. Weekblad, 1917, v. 14, p. 665–671, 811–814; see also J. J. van Laar, p. 808–810.

THERMOMETRY.

Anon.: Under laboratory notes from the H. K. Mulford Co., a list of nine different substances suitable for coloring the liquid in thermometer tubes is given.—Drug. Circ. 1916, v. 60, No. 12, p. 25.

Marvin, C. F.: A note on the nomenclature of thermometric scales.—Science, 1917, v. 47, p. 267–268.

Stratton, S. W.: Detailed descriptions of methods for the testing of clinical thermometers.—Circ. Bur. Stand. 1917, No. 5, p. 1–18.

Olivier, S. C. J.: A communication on the vaporization of mercury in thermometers and its effect on the indication of temperature.—Chem. Weekblad, 1917, v. 14, p. 325.

POLARIZATION AND REFRACTION.

Ledoux, A.: A description of a new method for the determination of the refractive index of liquids.—Compt. rend. acad. sc. 1917, v. 164, p. 305–308.

Moffitt, G. W.: An illustrated description of a new direct reading precision refractometer with a uniformly divided scale.—J. Ind. & Eng. Chem. 1917, v. 9, p. 305–309.

LeBas, Gervaise: An article dealing with the molecular refractivities of certain elements and simple compounds.—Chem. News, 1917, v. 115, p. 277–278.

Enklaar, C. J.: A report of refractometric investigations of hydrocarbons with two and three conjugate double linkings at the same time. The aliphatic terpenes and their derivatives.—Rec. trav. chim. 1917, v. 36, p. 215–246; through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 171.

Blas, Lorenzo M.: Data showing that the refraction of solutions of the chlorides, sulphates, and nitrates of ferric iron, chromium, cobalt, nickel, and manganese increases regularly with the concentration are given.—Ann. soc. quim. Argentina, 1916, v. 4, p. 294–314; J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 229.

Silberstein, L.: An analysis of the additive law of molecular refractivities and a theoretical derivation of the extra terms, such as that demanded by the double carbon linkage.—Phil. Mag. 1917, v. 33, p. 92–128.

Wagner, G.: A theoretical discussion of the formulas which have been suggested for arriving at the refractive power of a liquid.—J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 185.

Rakuzin, M. A.: A compilation of data from all sources relative to the optical activity of animal and vegetable proteins and their derivatives, enzymes, toxins, and antiserums.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 1251–1294 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 286.

MacKenzie, J. E., and Ghosh, S.: A report of researches dealing with the optical rotation and cryoscopic behavior of sugars dissolved in formamide and in water.—Chem. Abstr. 1917, v. 11, p. 1357.

Tingle, A., and Ferguson, A. A.: A discussion of the factors indicating the concentration and the optical rotatory power of aqueous solutions of nicotine. -Chem. Abstr., 1917, v. 11, p. 1014.

Baumann, C., and Grossfeld, J.: Notes on the polarimetric determination of starch in the presence of other optically active substances.—Ztschr. Unters. Nahr. u. Genussm. 1917, v. 33, p. 97–103 through J. Soc. Chem. Ind. 1917, v. 36, p. 662.

6. CHEMICAL CONSTANTS.

Pellet, H.: A procedure for the determination of sodium and potassium in the ash of vegetable matter is described.—Ann. chim. analyt. 1917, v. 22, p. 146–152, 179–185.

7. APPARATUS.

Anon.: An illustrated description of a universal dropping pipette.—Arch. Pharm. Chem. 1917, v. 24, p. 128–129.

Cook, R. C.: A convenient pipette for measuring fuming acids is made by connecting the small end of a filter tube to an ordinary pipette. The large upper end of the filter tube is covered with thin rubber sheeting. Air is expelled by increasing pressure on the diaphragm and acid drawn up by releasing it.—Chem.-Analyst, 1917, v. 22, p. 18–19.

Fuller, Aubrey V.: An illustrated description of a convenient device for rapidly washing pipettes.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1046–1047.

Gates, Frederick L.: An illustrated description of a safety cap for graduated pipettes.—J. Am. M. Assoc. 1917, v. 69, p. 467.

Anon.: An illustrated description of a weighing burette for liquids.—J. Ind. & Eng. Chem. 1917, v. 9, p. 873.

Beezenberger, F. K.: A description of a titration flask intended to take the place of the familiar type of weight burette.—J. Am. Chem. Soc. 1917, v. 39, p. 1321.

Hall, Frank: An illustrated description of a vacuum-jacketed pycnometer for liquids.—J. Am. Chem. Soc. 1917, v. 39, p. 1319–1321.

Neidle, Marks: An improved form of picnometer. The cap of the side arm of the picnometer is modified to provide for any liquid which may be driven out of the instrument by expansion during weighing.—J. Am. Chem. Soc. 1917, v. 39, p. 2587–2588.

Schoorl: An abstract of a paper describing a form of specific gravity bulb for hydrostatic weighing.—Chem. Weekblad 1917, v. 14, p. 1049.

Clark, C. B.: A description of a device for burette reading.—Chem. Abstr. 1917, v. 11, p. 228–243.

Coste, J. H.: An investigation to determine the most suitable diameter for the jet at the tip of burettes.—Analyst 1917, v. 42, p. 385–388.

Blount, Bertram: Results obtained in testing the accuracy of six analytical balances over a period of four months are reported.—J. Chem. Soc. Lond. 1917, v. 111, p. 1035–1039.

Dunnicliffe, Horace B.: A description of a simple apparatus for the purification of mercury.—Chem. News 1917, v. 116, p. 41–42.

Dushak, L. H. and Spencer, S. O.: A description of a modification of the Weinhold mercury distillation apparatus.—J. Phys. Chem. 1917, v. 21, p. 311–313.

Fishburn, H. P.: An illustrated description of a condenser without cork or rubber connections.—J. Am. Chem. Soc. 1917, v. 39, p. 1074.

Hayt, E.: An illustrated description of a new apparatus for fractionating petroleum and other volatile products.—Compt. rend. acad. sc. 1917, v. 165, p. 790–793.

Rordorf, Helene: An illustrated description of an apparatus for the distillation of phenol for the purpose of clarifying the latter when it has assumed a red color.—Schweiz. Apoth. Ztg. 1916, v. 54, p. 257–258.

Lewis, Harry F.: An illustrated description of a simple apparatus for the recovery, during evaporation, of organic salts.—J. Am. Pharm. Assoc. 1917, v. 6, p. 27–28.

Anon.: An illustrated description of an old pewter still manufactured in 1760.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 175.

Turner, R. R.: An illustrated description of an automatic receiver for use in steam distillation. An abstract.—Yearbook of Pharmacy, 1917, p. 294.

[illegible]: A description of a simple form of reflux condenser which can be used with different flasks without the use of a stopper for fitting it. Its efficiency is claimed to be high.—Bull. soc. chim. France, 1917, v. 21, p. 46–48.

Stearns, Orin: A new form of distilling head designed for the distillation of troublesome fluid extracts.—J. Ind. & Eng. Chem. 1917, v. 9, p. 972–973.

[illegible], G. P. and [illegible], N. C.: An illustrated description of a simple device for evaporating solutions to a definite volume.—J. Am. Chem. Soc. 1917, v. 39, p. [illegible].

Kober, Philip A.: An improved form of nephelometer-colorimeter is described. The instrument differs from the ordinary type of colorimeter, such as the Dubosq, in possessing movable cups instead of movable plungers. —J. Biol. Chem. 1917, v. 29, p. 155–168.

Moreau, E.: A new form of colorimeter. The apparatus consists of a flat-bottom, graduated tube of the same internal diameter as the ordinary comparison tubes, which has sealed in it near the lower end a lateral tube connected by rubber tubing to a reservoir containing the standard comparison solution.—Ann. Falsif. 1917, v. 10, p. 235–237.

Wegelin, G.: A description of an arrangement for the automatic washing of precipitates filtered with difficulty. The wash liquid is supplied intermittently, this being effected automatically by a siphon of the type familiar in the Soxhlet apparatus.—Kolloid Ztschr. 1917, v. 20, p. 270–274 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 462.

Lathrop, Elbert C.: A description of a simple device for the automatic and intermittent washing of precipitates.—J. Ind. & Eng. Chem. 1917, v. 9, p. 527–528.

Lidstone, F. M.: A mercurial viscometer designed for the purpose of measuring the viscosity of small quantities of oil is described.—J. Soc. Chem. Ind., 1917, v. 36, p. 270–271.

MacInnes, D. A., and Krieling, R. G.: An improved Victor Meyer vapor density apparatus. Improvements in connection with the means of introducing the substance and with the vaporization tube are described.—J. Am. Chem. Soc. 1917, v. 39, p. 2350–2354.

van Name, R. G., and Brown, W. G.: A description of an apparatus for determining freezing-point lowering. Illustrated.—Am. J. Sci. 1917, v. 43, p. 110–114.

Plaisance, G. P., and Pervier, N. C.: A device is described by which a number of solutions may be evaporated to any desired volume without attention.—J. Am. Chem. Soc. 1917, v. 39, p. 1238–1241.

Noorduijn, A. C.: An illustrated description of an electric oven designed for use in microelementary analysis.—Chem. Weekblad, 1917, v. 14, p. 1131–1135.

Anon.: An illustrated description of a new apparatus for determining the melting point of fats.—Giorn. farm. e chim. 1916, v. 4, p. 151–153, through Analyst, 1917, v. 42, p. 29.

Oddo, Giuseppe: An illustrated description of a new tube for cryoscopic determinations.—Gazz. chim. ital. 1917, v. 47, part 2, p. 188–199.

Pratt, L. S.: An illustrated description of an efficient desiccator constructed from a Büchner funnel.—J. Am. Chem. Soc. 1917, v. 39, p. 271–272.

Shaw, J. A. An illustrated description of a new pear-shaped filter flask.—J. Ind. & Eng. Chem. 1917, v. 9, p. [illegible].

Thoms, H. A description of a device for accelerating dialysis.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 1235–1240, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 561.

Turner, R. R. A pressure device for hastening filtration is described.—Chem. Analyst, 1917, v. 22, p. 20–21.

Twiss, D. F., and McCowan, W. A description of a glass continuous extraction apparatus somewhat resembling that of Blount, but with the outer jacket reaching only to a level just above the aperture by which the vapor of the solvent passes into the extraction cup.—J. Soc. Chem. Ind. 1917, v. 36, p. 692.

Weir, J. W. A modification of the Soxhlet extractor for use in the extraction of liquids is described and figured in the original.—J. Lab. & Clin. Med. 1917, v. 3, p. 204.

Vanino, Ludwig. An account of the history and construction of cobalt hygrometers.—Arch. Pharm. 1917, v. 255, p. 81–85, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 320.

Ward, T. J. Corks for use in extraction apparatus can be rendered impervious to the vapors of volatile liquids by soaking them in a solution of glycero-gelatin.—Analyst, 1917, v. 42, p. 326–327.

Mosbacher. An apparatus for the generation of hydrogen sulphide is described.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 176, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 464.

Anselmi, B. A modified Kipp apparatus for the generation of gas is described. The apparatus functions with a small quantity of the reacting liquid, always uses liquid of the same purity, is easily taken apart, and has other advantages.—Boll. chim.-farm. 1917, v. 56, p. [illegible].

Fernandez, R. O. An illustrated description of a simple gas generator which can be constructed with the apparatus found in the stock room of every laboratory.—J. Am. Chem. Soc. 1917, v. 39, p. 271.

Dennis, Horace G. A description of a direct reading gas-measuring apparatus.—J. Am. Chem. Soc. 1917, v. 39, p. 2145–2151.

Dando, F. Illustrated descriptions of a number of devices intended for use in pharmaceutical operations. The article includes illustrations of a simple percolator, a strainer for syrups, a funnel for introducing soft soap into bottles, etc.—Chem. & Drug. Australas. 1917, v. 32, p. 62.

[illegible], O. An illustrated description of a new apparatus for the filling of vials with calomel intended for hypodermic injections.—Giorn. farm. chim. 1917, v. 66, p. 46–49.

Aten, A. H. W. A description of a simple apparatus for the electrolytic production of sodium hypochlorite.—Chem. Weekblad, 1917, v. 14, p. [illegible].

8. FILTERS.

McBride, R. S., and Scherer, J. A.: A note on the reducing matter extractable from filter paper and its influence on titrations.—J. Am. Chem. Soc. 1917, v. 39, p. 928–933.

Wilkie, J. M., and Anderson, H. S.: A discussion of soluble filters and filtering media.—J. Soc. Chem. Ind. 1917, v. 36, p. 272–273.

Couch, James F., and Kersey, James E.: An account of the pharmaceutical uses of the filter press.—Am. J. Pharm. 1917, v. 89, p. 71–79.

9. COLOR STANDARDS AND COLORS.

Weir, J. W.: A description of a simple, inexpensive colorimeter readily made in any laboratory.—J. Lab. & Clin. Med. 1917, v. 3, p. 132.

Kober, Philip A.: An illustrated description of an improved nephelometer-colorimeter; also a description of a simplified method for using the instrument.—J. Biol. Chem. 1917, v. 29, p. 155–168.

Anon.: A review of the various methods employed to compare color materials and solutions with colored glasses, plates, and standard solutions.—Chem. Abstr. 1917, v. 11, p. 1064.

Dehn, William M.: The author discusses the physical and chemical sources of error in colorimetry, illustrating his remarks by reference to Folin's creatinine estimation, and appending a long bibliography on the subject.—J. Am. Chem. Soc. 1917, v. 39, p. 1392–1398.

Harrison, W.: An article dealing with the relation between the color and the degree of dispersion of particles in colored solutions.—Chem. Abstr. 1917, v. 11, p. 1352.

Kress, Otto, and McNaughton, G. C.: A report of further studies on the numerical expression for color as given by the Ives tint photometer.—J. Ind. & Eng. Chem. 1917, v. 9, p. 282–284.

Ostwald, W.: A review of recent investigations in color science. A physical and psychological study.—Chem. Abstr. 1917, v. 11, p. 1358.

Anon.: Descriptions of certain color reactions of the aromatic aldehydes with special reference to the colors resulting from the action of sulphanilic and naphthionic acids.—J. suisse pharm. 1916, v. 54, p. 382; Pharm. Weekblad, 1917, v. 54, p. 939–942.

Verkade, P. E.: Observations on the complex combinations of manganese with certain organic compounds. The color reactions are represented in the form of a table.—Chem. Weekblad, 1917, v. 14, p. 420–425.

Willard, H. H., and Greathouse, L. H.: A report of investigations dealing with the colorimetric determination of manganese by oxidation with periodate. A complete bibliography on the colorimetric determination of manganese is appended.—J. Am. Chem. Soc. 1917, v. 39, p. 2366–2377.

Abrams, D. A., and Harder, O. E. A description of a colorimetric test for the determination of organic impurities in sand.—Chem. Eng. 1917, v. 25, p. 9–11.

Elvove, Elias. A description of a colorimetric method for the estimation of small amounts of aniline. The method depends on the reaction which takes place between aniline and a hypochlorite.—J. Ind. & Eng. Chem. 1917, v. 9, p. 953–955.

Dehn, William M., and Ball, Alice A. A report of colorimetric studies of picrate solutions.—J. Am. Chem. Soc. 1917, v. 39, p. 1381–1392.

Smith, L. A study of the use of diphenylamine and diphenylbenzidine for colorimetric determinations.—Ztschr. analyt. Chem. 1917, v. 56, p. 28–42, through J. Soc. Chem. Ind. 1917, v. 36, p. 165.

10. ANALYTICAL METHODS AND RESULTS

Klein, Friedrich. In a review of the analytical methods of the U. S. P. IX it is stated that many of the specifications for purity are not sufficiently clear.—D. A. Apoth. Ztg. 1917, v. 38, p. 52.

Asher, Philip. A discussion of the chemistry of the assay processes of the U. S. P. IX.—Am. J. Pharm. 1917, v. 89, p. 111–121, 166–175.

Anon. Analytical methods employed at the Naval Medical Supply Depot, New York, for testing absorbent cotton are described.—U. S. Naval Med. Bull. 1917, v. 11, p. 435–436.

Molisch, Hans. Contributions to the microchemistry of plants.—Ber. deutsch. bot. Gesellsch. 1916, v. 34, p. 357–369, 554–559, and v. 35, p. 99–104, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 506–507.

Emich, F. Notes on the microchemical detection of nitrogen, carbon, sulphur, and phosphorus.—Ztschr. anal. Chem. 1917, v. 56, p. 1–18, through Pharm. Weekblad, 1917, v. 54, p. 1400.

Donau, S. A comprehensive review of recent literature relative to microsublimation and its application to the investigation of drugs, with special reference to the work of Behrens, Emich, Rosenthaler, Molisch, and Tunmann.—Giorn. farm. chim. 64, 594–598, through Chem. Abstr. 1917, v. 11, p. 3377.

Barker, T. V. A lecture on the application of crystallo-chemical analysis to medicine.—Lancet, 1917, v. 192, p. 708–709.

Nelson, E. K. Directions for the identification of volatile oils and their derivatives in the analysis of medicinal preparations.—J. Am. Pharm. Assoc. 1917, v. 6, p. 543–548.

Hubbard, W. S. An outline of a general method for the analysis of proprietary medicines.—J. Am. Pharm. Assoc. 1917, v. 6, p. 548–550.

Arragon, Ch., and Rauffer, G. A report of investigations dealing with the chemical analysis of spices.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 416–418.

Aronstamm, George C.: Notes on various methods for determining the alcoholic content of medicinal preparations.—Bull. Pharm. 1917, v. 31, p. 26–28.

Briggs, C. H.: A description of a method for the quantitative determination of glycerin in pharmaceutical preparations. The glycerin is recovered by distillation and weighed in the anhydrous state.—Ann. Falsif. 1917, v. 10, p. 250, from Rev. farm. 1916, No. 3.

Grönberg: A report of experiments to determine the quantity of active ingredients in pills and divided powders.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 88.

Miller, Reginald: A description of a procedure for the analysis of rhinitis tablets.—Am. J. Pharm. 1917, v. 89, p. 214–215.

van Itallie, E. I., and Woutman, W. F.: A presentation of data obtained in the analysis of pastilles of oxycyanide of mercury.—Pharm. Weekblad, 1917, v. 54, p. 654–659.

Richmond, H. D., and Hitchman, F. G.: A rapid method for the determination of oil in malt and cod liver oil preparations is described.—J. Soc. Chem. Ind. 1917, v. 36, p. 273.

Beal, George D., and Okey, Ruth: A description of a method for the qualitative identification of the drugs containing emodin. —J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

Hubbard, W. S.: Descriptions of methods for the identification of emodin-bearing drugs.—J. Ind. & Eng. Chem. 1917, v. 9, p. 518–521.

Emery, W. O.: A description of a method for the estimation of acetanilid and sodium salicylate in mixtures.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 70–71.

Emery, W. O.: A method for the estimation of caffeine, acetanilid, and codeine sulphate in mixtures containing the three substances, is described.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 72–73.

Emery, W. O.: A description of a method for the estimation of caffeine, acetanilid, quinine, and morphine in mixtures containing these substances.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 73–74.

Lahache: Methods for the evaluation of medicated cotton and gauze are described in detail.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 215–216, 226–228.

Miller, Reginald: A description of a rapid method for the approximate determination of milk sugar in headache powders.—Am. J. Pharm. 1917, v. 89, p. 154–155.

Miller, Reginald: A description of the method for the analysis of tablets containing salol and quinine sulphate.—Am. J. Pharm. 1917, v. 89, p. 215–217.

Miller, Reginald: A description of a procedure for the analysis of rhinitis tablets.—Am. J. Pharm. 1917, v. 89, p. 214–215.

Tunmann, O.: An account of the identification of poisons extractable from acid aqueous solutions by means of ether according to the Stas-Otto process. The substances mentioned are veronal, acetandide, salicylic acid, and phenacetin.—Apoth.-Ztg. 1917, v. 32, p. 288–292 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 551–553.

[illegible], A. H. and Wester, E. H.: Studies in legal chemistry at The Hague. A chemical investigation of a case of poisoning with potassium oxalate.—Pharm. Weekblad, 1917, v. 54, p. 1546–1556.

Spica, Carlo Luigi: A forensic method for demonstrating whether mercury detected in post mortem examination was originally present as mercurous or mercuric chloride.—Boll. chim.-farm. 1917, v. 56, p. 437–440.

Steenbergen, H. D.: A description of a new method for the quantitative determination of salicylic acid in foodstuffs.—Chem. Weekblad, 1917, v. 14, p. 914–921.

Chamot, E. M., and Cole, H. I.: An account of the use of textile fibers in microscopic chemical analysis. The paper deals especially with the use of treated silk fibers for the detection of acids or alkalies in minute quantities of liquids.—J. Ind. & Eng. Chem. 1917, v. 9, p. 969–971.

Carnot, Adolphe: A description of a new method for the separation of the five metals of the group soluble in ammonia, namely, zinc, cadmium, copper, nickel, and cobalt.—Bull. soc. chim. France, 1917, v. 23, p. 254–260.

Hamburger, L., and Koopman, W.: An illustrated article on the analysis of small quantities of various gases.—Chem. Weekblad, 1917, v. 14, p. 742–752.

Harries, C., and Oppenheim, K.: A note on the identification of aliphatic aldehydes.—Chem. Zentralbl. 1916, v. 2, p. 991, through J. Soc. Chem. Ind. 1917, v. 36, p. 568.

Harned, Herbert S.: Researches on the titration of some bivalent metal cations by the conductance method.—J. Am. Chem. Soc. 1917, v. 39, p. 252–256.

Vürtheim, A.: Notes on the recovery of the perchlorate residues resulting from potassium determinations.—Chem. Weekblad, 1917, v. 14, p. 986–988.

Spielmann, Percy E., and Jones, F. B.: A distillation method for the estimation of xylene in solvent naphtha is described.—J. Soc. Chem. Ind. 1917, v. 36, p. 489–490.

Smith, George M.: Observations on the contamination of precipitates in gravimetric analysis. A discussion of solid solution and adsorption vs. higher order compounds.—J. Am. Chem. Soc. 1917, v. 39, p. 1152–1173.

Richardson, F. W.: A method for the estimation of free sulphuric, nitric, and nitrous acids in the presence of each other.—J. Soc. Chem. Ind. 1917, v. 36, p. 13–15.

Duboux, Marcel: Descriptions of new methods for the determination of the hydrogen-ion concentration of acid liquids as applied to wines.—J. chim. phys. 1917, v. 15, p. 473–501.

DeCoquet, C.: A new technique for the quantitative determination of ferricyanides by titration with potassium permanganate.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 215–218.

Bruhns, G.: A method for the titration of oxalic acid with alkalies and ammonia in the presence of methyl orange is described.—Chem. Ztg, 1917, v. 41, p. 189 through J. Soc. Chem. Ind. 1917, v. 36, p. 545.

Bougault, J.: The results of a study of the action of iodine on the alkalies and of the reagent, iodine + alkali, in chemical analysis.—J. pharm. et chim. 1917, v. 16, p. 33–45.

Lyons, Edward, and Reid, E. E.: Studies on the identification of organic acids.—J. Am. Chem. Soc. 1917, v. 39, p. 1727–1750.

Boekhout, F. W. J., and deVries, J. J. O.: An investigation of Duclaux's method for the estimation of volatile fatty acids.—Centralb. f. Bakteriol. 1916, v. 46, p. 505–513 through J. Soc. Chem. Ind. 1917, v. 36, p. 236.

Gilleski, L. J., and Walters, E. H.: The possibilities and limitations of the Duclaux method for the estimation of volatile acids.—J. Am. Chem. Soc. 1917, v. 39, p. 2027–2055.

Lamb, A. R.: A note on the use of Duclaux's method for the determination of volatile fatty acids.—J. Am. Chem. Soc. 1917, v. 39, p. 746–747.

Upson, Fred W., et al.: A report of experiments with the use of the Duclaux method for the estimation of the volatile fatty acids.—J. Am. Chem. Soc. 1917, v. 39, p. 731–742.

Richmond, H. D.: Studies in steam distillation: IV. Proponic, butyric, valeric, and caproic acids. V. Some applications of Duclaux's method.—Analyst, 1917, v. 42, p. 125–139.

Dyer, D. C.: A detailed description of a new method of steam distillation for the determination of the volatile fatty acids. A series of colorimetric qualitative reactions for their identification is also given.—J. Biol. Chem. 1917, v. 28, p. 445–473.

Kauffman, M.: A description of a new method for the quantitative determination of the water-soluble fatty acids of butter and other fats.—Chem. Weekblad, 1917, v. 14, p. 364–367.

Mangels, C. E., and Trowbridge, P. F.: A method for the determination of crude fiber is described. Analytical data obtained in the application of this method, together with data obtained by other methods are presented.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 132–134.

Bidwell, G. L., and Walton, G. P.: Data showing the comparative value of the Kennedy modification of the Sweeney method and of the official method for the determination of crude fiber are presented.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 32–35.

Bjerrum, Niels: A discussion of the modern conception of acid and basic reactions and their application to chemical analysis.—

Ztschr. anal. Chem. 1917, v. 56, p. 13–28; through Pharm. Weekblad, 1917, v. 54, p. 1379–1380.

Besson, A. A.: A description of a distillation method for the determination of moisture in soap and cheese.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 69–71.

Berg, R.: A description of a method for the estimation of small quantities of iron and aluminum in foods.—Chem.-Ztg. 1917, v. 41, p. 56–57; through Analyst, 1917, v. 42, p. 182.

Schouten-Dekker, W. S. J., and Tuinzing, R. W.: An iodometric method for the determination of ammonium sulphate, with special reference to fertilizers is described.—Exper. Sta. Rec. 1917, v. 37, p. 413.

Sacher, J. F.: As a simple method for determining the purity of soluble chromates for technical use, the titration of the dichromates to normal chromates with KOH volumetric solutions and the chromates to dichromates with sulphuric acid volumetric solutions is recommended.—Chem. Abstr. 1917, v. 11, p. 1512.

Chapman, A. C.: A lecture discussing the main lines of advance in the domain of modern analytical chemistry.—Chem. News, 1917, v. 115, p. 255–257, 269–271, 278–279.

Anon.: A reprint of the report of the Committee on Fats and Oils of the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society. The report deals with tentative standard methods for the sampling and analysis of commercial fats and oils other than those of the cocoanut, butter, and linseed groups.—Am. Perf. 1917, v. 12, p. 246–250.

Anon.: A book review calls attention to a volume edited by Wilfred W. Scott entitled *Standard Methods of Chemical Analysis*.—Oil, Paint & Drug Rep. 1917, v. 91, No. 13, p. 14.

Anon.: A book review of *Schimpf's Volumetric Analysis* states that the author has presented in a most useful form a concise text-book on quantitative chemical analysis which is admirably fitted to the needs of the student of pharmacy.—Am. Druggist, 1917, v. 65, No. 11, p. 45.

Anon.: A book review calls attention to a volume by John Muter entitled *A Short Manual of Analytical Chemistry, Qualitative and Quantitative*—Inorganic and Organic.—Midl. Drug. 1917, v. 51, p. 160.

[illegible], D. G.: A review of a volume by Vittorio Villavecchia on applied analytical chemistry.—Giorn. farm. chim. 1917, v. 66, p. 215–216.

Raubenheimer, Otto: A review of the 4th English edition of a work by F. P. Treadwell translated by William T. Hall entitled *Analytical Chemistry* states that the two volumes are masterpieces of their kind and should be found in all chemical laboratories.—D. A. Apoth.-Ztg. 1917, v. 38, p. 117.

Anon.: A book review calls attention to the second volume of Samuel Parsons Mulligen's work entitled *A Method for the Identification of Pure Organic Compounds.*—Pharm. J. 1917, v. 98, p. 108.

H. C. J. H. G.: A review of a small work on quantitative analysis by J. Ambr. Barth entitled *Repetitorium und Praktikum der quantitativen Analyse.* –Chem. Weekblad, 1917, v. 14, p. 535.

Anon.: A book review of a volume by J. V. Dubsky entitled *Simple Micro-elementary Analyses for the Determination of Organic Substances.*—Pharm. Weekblad, 1917, v. 54, p. 105.

P. J. M.: A review of a volume on micro-chemical analysis by Fritz Pregl, entitled *Die quantitative organische Mikro analyse.*—Chem. Weekblad, 1917, v. 14, p. 298.

II. TESTS.

Brown, L. A.: From the standpoint of the use of the U. S. P. as a legal standard, the change in the language of the chemical tests is most important. In former editions nearly every test began "If * * * gram be dissolved." In the present edition it is changed to the imperative: "Dissolve * * * gram."—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 2.

Hankin, E. H.: Tests for a number of narcotic and anesthetic drugs are described. The nitric-acid test, the permanganate-film test, the reaction with Fehling's solution, the effect of melting, and the iodate tests were studied in this connection. An abstract.—Analyst, 1917, v. 42, p. 174–175.

Monnier, A.: Distinctive reactions for the detection and identification of perchlorates, periodides, persulphates, percarbonates, and perborates. –Ann. chim. analyt. 1917, v. 21, p. 237.

Macri, V.: A test for manganese salts. When a solution containing manganese, even in very small amounts, is rendered slightly alkaline and treated successively with a few drops of alkali oxalate solution and of acetic acid, the liquid assumes a distinct rose-red color.—Boll. chim.-farm. 1917, v. 56, p. 377.

HALOGENS.

Aten, A. H. W.: A theoretical paper in which the theory of the electrolytic estimation of halogens as silver halides is developed on the basis of the Nernst diffusion theory. –Ztschr. phys. Chem. 1917, v. 92, p. 320–344, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 419.

Lemp, J. F., and Broderson, H. J.: A description of a method for the determination of halogens in organic compounds.—J Am. Chem. Soc. 1917, v. 39, p. 2069–2074.

Curtman, Louis J., and Harris, Ben R.: The interference of thiocyanates, ferrocyanides and ferricyanides in the detection of iodides by means of palladium. –J. Am. Chem. Soc. 1917, v. 39, p. 266–270.

Kempf, Richard: Notes on the titration of iodine with thiosulphate. Attention is directed to the importance of avoiding the use of an excess of mineral acids in iodine solutions which are titrated with thiosulphate solution.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 71-72, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 502.

Thompson, William J., and Synder, J. Paul: A description of a method for the determination of organically and inorganically combined iodine. The method presents no new features except that hydrogen peroxide in the presence of phosphoric acid is employed as the oxidizing agent for the liberation of the iodine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 18-21.

Kolthoff, I. M.: A discussion of experiments with the argentometric methods for the determination of bromides and iodides. The method described by the author is stated to be well adapted to the iodine determinations called for in the Ph. Ndl.—Pharm. Weekblad, 1917, v. 54, p. 761-766.

Rupp, E., and Hollatz, E.: A volumetric method for the estimation of bromides in the presence of small quantities of chlorides is described. The method is designed especially for the evaluation of pharmaceutical preparations, such as Bromum compositum, Ph. Germ.—Arch. Pharm. 1917, v. 255, p. 120-129, through J. Soc. Chem. Ind. 1917, v. 36, p. 924.

Rupp, E.: A modification of the bromate method of estimating the bromide content of alkali bromides or their mixtures ("Bromum compositum") is described.—Arch. Pharm. 1917, v. 255, p. 303-304, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 540.

Murmann, E.: A note on a change in the usual gravimetric method for the quantitative determination of chlorine and silver.—Chem. Techn. Uebers. 1917, p. 57, through Pharm. Weekblad, 1917, v. 54, p. 1171-1172.

McCracken, Robert F., and Walsh, Mary D.: Observations on the McLean-Van Slyke iodometric method for the titration of small amounts of halides in its application to the chlorides.—J. Am. Chem. Soc. 1917, v. 39, p. 2501-2506.

Kolthoff, I. M.: Notes on the titration of chlorides by Mohr's method and its application to the examination of potable water.—Pharm. Weekblad, 1917, v. 54, p. 612-618.

Torossian, Gregory: A description of an iodometric method for the determination of chlorine in chlorides. Data showing the results obtained in a number of analyses are given.—J. Ind. & Eng. Chem. 1917, v. 9, p. 751-752.

Wischo, Fritz: The difference in the behavior of solutions of chlorates and hypochlorites toward bromide and hydrochloric acid is made the basis of a test for identifying chlorates in the presence of hypochlorites.—Pharm. Post. 1917, v. 50, p. 581, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 539.

Monnier, A.: A note on the use of methylene blue in the detection and estimation of perchlorates in Chili saltpeter.—Ann. chim. analyt. 1917, v. 22, p. 1–6.

HYDROGEN SULPHIDE.

Drushel, W. A., and Belston, C. M.: A description of a method for the quantitative estimation of small amounts of sulphide sulphur. The method depends on the liberation of hydrogen sulphide and its quantitative absorption by lead acetate paper, the stain being compared with standard stains produced by decomposing solutions of sodium sulphide containing from 0.0002 to 0.004 per cent of sulphide sulphur.—Chem. News, 1916, v. 114, p. 272–273; Analyst, 1917, v. 42, p. 58.

Franceschi, G. B.: A note on the action of hydrogen sulphide upon mercuric iodide in alcoholic mixtures. When a small amount of hydrogen sulphide is employed, the compound formed has the formula $HgS.HgI_2$. If an excess of hydrogen sulphide is present, HgS is formed. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 104–105.

Fuller, Aubrey V.: A simple improvised apparatus for the precipitation of hydrogen sulphide under pressure. Illustrated.—J. Ind. & Eng. Chem. 1917, v. 9, p. 792–793.

Jayson, Alfred R., and Oesper, Ralph E.: An investigation of the influence of added substances on the end point in the iodometric titration of hydrogen sulphide.—J. Ind. & Eng. Chem. 1917, v. 9, p. 975–977.

SULPHUR, SULPHATES, AND SULPHITES

Denigès, G.: A description of a rapid method for the identification of the sulphuric ion in insoluble sulphates. The reagent employed consists of 10 grams of crystalline mercuric nitrate dissolved in a mixture of 100 cubic centimeters of water and 1 cubic centimeter of pure nitric acid. This reagent gives a yellow color with all insoluble sulphates.—Bull. soc. chim. France, 1917, v. 23, p. 36–39.

Vulquin, E., and Entat, M.: A note on the determination of small amounts of free sulphuric acid in the presence of sulphates.—Ann. Chim. analyt. 1917, v. 22, p. 61–66, also J. Soc. Chem. Ind. 1917, v. 36, p. 545.

Ferguson, John B.: A report of experiments with the iodometric method for the determination of sulphur dioxide and the sulphites.—J. Am. Chem. Soc. 1917, v. 39, p. 364–373.

PHOSPHORUS AND PHOSPHATES.

Lemkes, H. J.: A discussion of experimental researches on the detection of phosphorus by the method of Dusart and Blondlot.—J. pharm. et chim. 1917, v. 15, p. 177–188.

Liberi, G. A method for the determination of phosphorus in zinc phosphide is described.—Ann. chim. applicata, 1917, v. 7, p. 144–151.

Rather, J. B. A method for the determination of phytin phosphorus in plant products.—J. Am. Chem. Soc. 1917, v. 39, p. 2506–2515.

Kolthoff, I. M. A second communication on the methods for the determination of the alkalinity and the phosphorus content of the ash of foodstuffs.—Chem. Weekblad. 1917, v. 14, p. 547–558.

NITROGEN, NITRATES, AND NITRITES

Salkowski, E. An account of the forerunners of Kjeldahl's method for estimating nitrogen.—Biochem. Ztschr. 1917, v. 82, p. 60–67, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 504.

Brill, Harvey C., and Agcaoili, Francisco: An article pointing out some limitations of the Kjeldahl method for the determination of nitrogen.—Philippine J. Sc., 1917, v. 12A, p. 261–265.

Abderhalden, Emil, and Fodor, Andor: A detailed account of the Kjeldahl method applied to the determination of nitrogen in small quantities of materials, such as 0.5 cubic centimeter of urine or 10 milligrams of an amino acid.—Ztschr. physiol. Chem. 1917, v. 100, p. 190–201, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 540.

Nolte, O. In the Kjeldahl method for the determination of nitrogen digestion with sulphuric acid is accelerated by SO_2 and oxalic acid in the case of caffeine and uric acid.—Ztschr. analyt. chem. 1917, v. 56, p. 391–393, through Physiol. Abstr. 1917, v. 2, p. 659.

Lagers, G. H. G. Observations on the determination of total nitrogen by the Jodlbaur and Kjeldahl method.—Chem. Weekblad. 1917, v. 14, p. 492–499.

Villiers, A., and Moreau-Talon, A. Notes on the estimation of nitrogen by the Kjeldahl method.—Bull. soc. chim. France, 1917, v. 23, p. 308–311.

Wohl-Joachimowitz, Alice. To prevent the loss of ammonia when rendering alkaline the diluted mixture in the Kjeldahl method for the determination of nitrogen, a concentrated solution of sodium hydroxide is added so that it forms a layer below the acid solution. The two layers are then mixed after connecting the flask with the condenser.—Chem. Ztg. 1917, v. 41, p. 87, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 217.

Arnd, T. A method for the determination of nitrogen in nitrates and nitrites makes use of an alloy of copper and magnesium for liberating ammonia. The latter is distilled into an excess of standard acid and titrated in the usual way.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 169–172, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 504.

Smith, L.: Observation on the use of diphenylamine and diphenylbenzidine for the colorimetric estimation of nitric acid.—J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 217.

Forbes, E. B., Mangels, C. E., and Morgan, L. E.: A report of a study of the methods of estimating metabolic nitrogen. The acid-pepsin and pepsin-pancreatin methods appear to give the best results.—J. Agric. Research, 1917, v. 9, p. 406–411.

Gericke, W. F.: A study of the methods for the determination of small amounts of nitrates in the presence of chlorides.—J. Ind. & Eng. Chem. 1917, v. 9, p. 585–586.

Oddo, B.: An illustrated description of a method for the estimation of nitrogen in explosives.—Gazz. chim. ital. 1917, v. 47, p. 145–158.

Obregón y Garcia, J. G.: A description of a color reaction for the identification of the nitrites.—Farm. Españ. 1917, v. 49, p. 487–488.

AMMONIA.

Barnett, G. D.: A micro titration method for the determination of ammonia is described.—J. Biol. Chem. 1917, v. 29, p. 459 462.

van Bers, G. H. C.: A method of estimating ammoniacal nitrogen by means of formaldehyde is described.—Chem. Weekblad, 1917, v. 14, p. 968–975.

Adler, L.: In a modified Kjeldahl method for the volumetric estimation of ammonia, the author recommends the collection of ammonia in a solution of boric acids instead of sulphuric acid. An abstract.—Analyst, 1917, v. 42, p. 51.

CARBON AND CARBONATES.

Müller, Ernst: A description of a method for the detection of carbon in inorganic and organic substances. The material is heated with potassium nitride when potassium cyanide is formed. It may be recognized in the usual way by conversion into Prussian blue.—J. prakt. Chem. 1917, v. 95, p. 53–54 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 269.

Mixter, W. G., and Haigh, F. L.: An illustrated description of the Penfield test for carbon.—J. Am. Chem. Soc. 1917, v. 39, p. 374–375.

Emich, F.: Descriptions of methods for the microchemical detection of carbon and sulphur.—Ztschr. analyt. Chem. 1917, v. 56, p. 1 through J. Chem. Soc. Lond. 1917, v. 112, p. 218.

Wise, Louis E.: A description of a simplified microcombustion method for the determination of carbon and hydrogen.—J. Am. Chem. Soc. 1917, v. 39, p. 2055–2068.

Higgins, H. L., and Marriott, W. McKim: A description of a colorimetric method for the determination of the carbon dioxide percentage in air. -J. Am. Chem. Soc. 1917, v. 39, p. 68–71.

Mestrezat, W.: Notes on the determination of alkaline carbonates and bicarbonates in the cold and on the analysis of mixtures of these salts; also notes on the use of litmus and phenolphthalein as indicators.—Bull. soc. chim. France, 1917, v. 33, p. 250-254.

Clarens, J.: A description of a method for the determination of carbonate and bicarbonate or of caustic alkali and carbonate in mixtures containing both. The principle of the method consists in the determination of the CO_2 gas evolved in analysis by the customary alkalimetric method.—Bull. soc. chem. France. 1917, v. 21, p. 120-124.

Kolthoff, I. M.: A report of studies on the titration of carbonic acid and its salts.—Ztschr. anorg. Chem. 1917, v. 100, p. 143-158.

Kolthoff, I. M.: A presentation of the results of extensive researches on the estimation of the carbon dioxide in the carbonates by volumetric methods.—Chem. Weekblad. 1917, v. 14, p. 780-794.

Kolthoff, I. M.: A description of a method for the detection and determination of carbonate in bicarbonates.—Pharm. Weekbl. 1917, v. 54, p. 1046-1051.

ALKALI COMPOUNDS.

Jelgen, H. J.: A compilation (with references) of the various qualitative and quantitative tests for the indentification of potassium.—Chem. Weekbl. 1917, v. 14, p. 578-585.

Gandin, C. V., and Braun, V.: A description of a method for the gravimetric determination of potassium by the use of sodium cobaltic nitrite.—Ann. Falsif. 1917, v. 10, p. 572-575.

Gooch, F. A., and Blake, G. R.: Some observations on the perchlorate method for the determination of the alkali metals.—Am. J. Sc. 1917, v. 44, p. 381-386.

Baxter, Gregory P., and Kobayashi, Masusuke: Recommendations for certain changes in the perchlorate method for the determination of potassium.—J. Am. Chem. Soc. 1917, v. 39, p. 249-252.

Hibbard, P. L.: A study of the determination of potash, with special reference to the Lindo-Gladding method.—J. Ind. & Eng. Chem. 1917, v. 9, p. 504-513.

Pellet, H.: A detailed review of the hydrochloroplatinic acid method for determining sodium and potassium, with special reference to the analysis of plant ash.—Ann. chim. analyt. 1917, v. 22, p. 146-153 and 170-184.

Robinson, W. O.: A proximate quantitative method for the determination of potassium and sodium in plant ash is described.—J. Ind. & Eng. Chem. 1918, v. 10, p. 50-51.

Tarbes, Dominguez: A method for the estimation of potassium and sodium in the form of sulphates by the use of platinum chloride is described.—Ann. chim. analyt. 1917, v. 22, p. 160-162.

ALKALINE EARTH COMPOUNDS.

Raikow, P. M.: A description of a method for the detection of calcium in the presence of strontium and barium.—Pharm. Weekblad, 1917, v. 54, p. 720 from Chem. Ztg. 1916, p. 781.

Karaoglanow, Z.: A method for the detection of calcium in the presence of barium and strontium is described. Barium fluoride solution is used as the reagent, the test depending on the very sparing solubility of calcium fluoride and the relatively greater solubility of barium and strontium fluorides.—Ztschr. anal. Chem. 1917, v. 56, p. 138–141 through Analyst, 1917, v. 42, p. 249.

Canals, E.: The first installment of a paper on the estimation of calcium and magnesium in different salt mixtures discusses the various methods for the estimation of calcium.—Bull. soc. chim. France, 1917, v. 23, p. 422–430.

Molisch, Hans: A description of a microchemical method for the detection of dissolved calcium compounds in plant tissues by means of sodium carbonate.—Ber. deutsch. bot. Gesellsch. 1916, v. 34, p. 288–295; see also p. 357–363, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 387.

Willis, L. G., and MacIntire, W. H.: A rapid method for the determination of lime consists in igniting the calcium precipitated as oxalate with a fusion mixture composed of equal parts of $(NH_4)_2SO_4$ and NH_4Cl, and weighing the $CaSO_4$ formed.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1114–1116.

Bruckmiller, F. W.: Researches on the titration of magnesium in the analysis of water.—J. Am. Chem. Soc. 1917, v. 39, p. 610–615.

Busvold, N.: A rapid method for the determination of magnesium in limestone is described.—Chem. Ztschr. 1917, v. 41, p. 42 through J. Soc. Chem. Ind. 1917, v. 36, p. 290.

ANTIMONY AND ARSENIC.

Romijn, G. Bougault: An investigation of the methods of Bougault and of the Ph. Ndl. for the determination of arsenic in drugs. The best results were obtained with the method of the Dutch pharmacopoeia when the proper conditions were observed.—Pharm. Weekbl. 1917, v. 54, p. 1216–1224.

Vuaflart, L.: The detection of arsenic by means of mercuric chloride paper. The advantages of the Gutzeit test are discussed, also means for overcoming the interfering action of sulphites which are sometimes present in glucose.—Ann. falsif. 1916, v. 9, p. 446–448 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 331.

Hollins, C.: An account of the application of the Gutzeit test to works estimation of arsenic. An apparatus is described which has proved useful in examining the quality of materials containing small amounts of arsenic, such as dearsenicated vitriols, phosphates, phosphoric acid, etc.—J. Soc. Chem. Ind. 1917, v. 36, p. 576-577.

Klason, Peter. An investigation of the Fresenius-Babo method for the estimation of small quantities of arsenic. Results obtained with the use of the sodium carbonate-potassium cyanide method, as usually carried out in Sweden, are also described.—J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 151-152.

Köhler, S. A description of a method for the quantitative determination of small amounts of arsenic. The substance is reduced by means of phosphorous acid instead of sulphurous acid. Iodine volumetric solution is finally added and the excess of iodine titrated with sodium thiosulphate volumetric solution.—Pharm. Weekblad, 1917, v. 54, p. 161-162; from Apoth. Ztg. 1916, p. 291.

Lehmann, F. Notes on the application of a method for the estimation of arsenic in animal material, previously described by the author, to the determination of arsenic in vegetable material, such as iron-arsenic pills.—Arch. Pharm. 1917, v. 255, p. 105-107; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 579.

Ramberg, L., and Sjostrom, G. A distillation method for the quantitative determination of arsenic is described.—Apoth. Ztg. 1917, v. 32, p. 476.

Schmidt, Ernst. Notes on the estimation of arsenic by the sulphide method.—Arch. Pharm. 1917, v. 255, p. 45-64; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 331.

Pérégrin, J. B. A critical examination of Lunge's method for the rapid determination of arsenic in sulphuric acid.—Ann. chim. analyt. 1917, v. 22, p. 24-25.

Meillère, G. A detailed description of a method for the detection of arsenic in the hair and skin of industrial workers showing symptoms of arsenic poisoning.—Ann. chim. analyt. 1917, v. 22, p. 6-8.

Gautier, Armand, and Clausmann, P. A description of a new method for the destruction of organic matter when testing for arsenic in tissues. The method consists of mixing the dry material with lime and then incinerating.—Compt. rend. acad. sc. 1917, v. 165, p. 11-16.

Neumann, Karl, and von Spulhart, R. A description of an apparatus for the extraction of sulphur from arsenic trisulphide precipitates.—Chem. Ztg. 1916, v. 40, p. 981; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 102.

METALS

Klein, Friedrich. Yellow ammonium sulphide is stated to be more satisfactory than the hydrogen sulphide test solution of the U. S. P. in testing for the presence of heavy metals.—D. A. Apoth. Ztg. 1917, v. 38, p. 42.

Polinski, M.: A detailed description is given of a method for detecting and identifying small quantities of heavy metals in water.—Chem.-Analyst, 1917, v. 22, p. 24.

Smits, A.: A didactic discussion of the rôle of the electrons in the chemistry of the metals.—Chem. Weekblad, 1917, v. 14, p. 798–808.

von Bichowsky, F. R.: A discussion of the electrometric methods for the titration of zinc.—J. Ind. & Eng. Chem. 1917, v. 9, p. 668–671.

Ericson, Eric J.: A method of separating zinc from cadmium and the determination of the latter iodometrically.—J. Ind. & Eng. Chem. 1917, v. 9, p. 671.

Fenner, G., and Rothschild, Ed.: Some observations on the estimation of zinc by the Schaffner method.—Ztschr. analyt. Chem. 1917, v. 56, p. 384–390, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 580.

Hassreidter, V.: A discussion of the various modifications of Schaffner's method for the estimation of zinc. It is concluded that the average results obtained are trustworthy.—Ztschr. analyt. Chem. 1917, v. 56, p. 311–316, through J. Chem. Soc. 1917, v. 112, part 2, p. 509.

Marsh, J. E., and Lye, O. G.: A modification of the calcium oxide combustion method for the estimation of mercury in organic compounds is described.—Analyst, 1917, v. 42, p. 84.

Browning, Philip E., and Scott, Sewell E.: A method for the qualitative detection of germanium and its separation from arsenic is described.—Am. J. Sci. 1917, v. 44, p. 313–315.

Andress, F. J.: A description of a volumetric method for the determination of lead.—Chem. Abstr. 1917, v. 11, p. 924.

Sacher, J. F.: A note on the use of colloidal phenomena as an indicator in quantitative analysis. In the estimation of lead by titration with a solution of ammonium molybdate, the supernatant liquid is turbid so long as the reaction is incomplete, but this turbidity disappears suddenly at the end point.—Koll. Ztschr. 1916, v. 19, p. 276–277, through Analyst, 1917, v. 42, p. 250.

Murmann, Ernst: In the estimation of chlorine and silver the author recommends the reduction of the silver by the addition of ash-free paper pulp before or after precipitation. After ignition of the filter and precipitate the silver remains in the spongy, metallic condition, and can readily be tested for purity.—Chem. Zentralbl. 1916, v. 2, p. 427, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 38

Engle, W. D., and Gustavson, R. G.: A volumetric method for the determination of cobalt consists of oxidation with sodium perborate, removal of the excess of the oxidizing agent, the addition of potassium iodide and dilute sulphuric acid, and finally titration with a standard solution of sodium thiosulphate.—Chem. News, 1917, v. 115, p. 54–55.

Mayer and Schram: A description of a very sensitive reaction for copper. The reagents employed are a N/100 solution of sodium bicarbonate and a 30 per cent solution of hydrogen dioxide.—Ztschr. anal. Chem. 1917, v. 56, p. 129–138, through Pharm. Weekblad. 1917, v. 54, p. 1358.

Browning, Kendall C.: An electrolytic method for the detection of traces of mercury salts for toxicological purposes. The mercury is identified by its spectrum in a Dupré tube.—J. Chem. Soc. Lond. 1917, v. 111, p. 236–240.

Anonsen, Bjørn: An iodometric method for the determination of iron and copper. $CuSO_4$ solutions treated with KI and titrated with N/10 $Na_2S_2O_3$ gave constant and easily attained values.—Tidskr. Kem. Farm. Therapi. 1917, v. 14, p. 246–247.

Palkin, Samuel: A method for the separation of aluminum from iron by means of ether.—J. Ind. & Eng. Chem. 1917, v. 9, p. 951–953.

ORGANIC COMPOUNDS.

Anon: An intense reddish-violet coloration is obtained when a trace of an alkaloid from the Solanaceae is heated with a drop of a mixture consisting of p-dimethylamino-benzaldehyde, 2 grams; concentrated sulphuric acid, 6 grams; and water, 0.4 gram.—J. pharm. et chim. 1917, v. 15, p. 54.

Sanchez, Juan A.: Tests for the identification of novocaine, dionine, sulphonal, trional, and tetronal are described.—Rev. farm. 1917, v. 60, p. 699.

Tunmann, O.: Descriptions of methods for the identification of the poisons extractable from acid aqueous solutions by means of ether according to the Stas-Otto process (veronal, acetanilid, salicylic acid, and phenacetin).—Apoth. Ztg. 1917, v. 32, p. 289–292 and 298–299, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 551.

Hankin, E. H.: Tests for certain narcotic and anesthetic drugs are described. Color reactions of a large number of alkaloids, narcotic substances, etc., are recorded, especially those given by cycloform, beta-eucaine, orthoform, nirvanin, anesthesin, novocaine, holocaine, cocaine, stovaine and alypin.—Indian J. Med. Res. 1916, v. 4, p. 247–265, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 184.

Guglialmelli, L.: A description of a delicate test for pyramidone. Arsenotungstic or arsenotungstomolybdic acids are employed, followed by an alkali, when a characteristic color is obtained.—An abstract.—Analyst, 1917, v. 42, p. 47.

Reid, E. E.: Studies in the identification of alcohols.—J. Am. Chem. Soc. 1917, v. 39, p. 1249–1255.

Formanek, J., and Knop, J.: A report of investigations dealing with the detection of phenols by the spectroscope.—Ztschr. analyt. Chem. 1917, v. 56, p. 273–298, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 513.

Reid, E. E.: A report of researches on the identification of phenols by the use of p-nitrobenzyl bromide.—J. Am. Chem. Soc. 1917, v. 39, p. 304–309.

Dezani, S.: A delicate reaction for the detection of nitriles is based on the fact that hydrocyanic acid is formed when a solution of a nitrile is boiled with an equal volume of hydrogen peroxide solution and two or three drops of a 5 per cent solution of ferric chloride. –Atti R. Accad. Sci. Torino, 1917, v. 52, p. 826–833, through J. Soc. Chem. Ind. 1917, v. 36, p. 1289.

Bougault, J.: Aldoses are determined by measuring the quantity of iodine required for their oxidation in the presence of sodium carbonate.—Compt. rend. Acad. sc. 1917, v. 164, p. 1008–1011.

Tsalapatanis, Lucas: A note on the detection of acrolein by means of Cramer's reagent.—Anales soc. quim. Argentina, 1917, v. 5, p. 244–245.

Wolff, Jules: A biochemical reaction for distinguishing between catechol, quinol, and resorcinol. An intense blue coloration is obtained when 2 cubic centimeters of a 0.1 per cent catechol solution are treated with 2 drops of a glycerol extract of a fungus rich in laccase and 5 drops of 3 per cent potassium iodide solution containing 2 per cent of soluble starch and 3 drops of 5 per cent acetic acid. Quinol only gives a reaction in the presence of sulphuric acid, while resorcinol does not give a coloration either in the presence of acetic or sulphuric acids.—J. pharm. et chim. 1917, v. 15, p. 94.

Lyman, J. A., and Reid, E. E.: A continuation of work on the identification of organic acids by means of p-nitrobenzyl bromide.—J. Am. Chem. Soc. 1917, v. 39, p. 701–711.

Koher, Philip A.: Some improvements in the copper method for the estimation of amino acids. –J. Ind. & Eng. Chem. 1917, v. 9, p. 501–504.

Denigès, G.: A description of a new method for the identification and quantitative estimation of butyric acid. –Bull. Soc. Pharm. Bordeaux, 1917, v. 55, p. 209–215.

Curtman, L. J., et al.: An investigation of the sensitiveness of the test for tartrates which depends on the formation of the copper tartrate complex. By the use of potassium ferrocyanide for the detection of the dissolved copper in the filtered solution, it was found to be possible to detect 0.2 milligram of tartrate. Many other substances give a positive test in the absence of tartrates.—J. Am. Chem. Soc. 1917, v. 39, p. 2623–2630.

Curtman, Louis J., and Harris, Ben R.: Comments on the inadequacy of the ferric basic acetate test for acetates.—J. Am. Chem. Soc. 1917, v. 39, p. 1315–1317.

Reid, E. E.: Researches on the use of p-nitrobenzyl bromide as a reagent for the identification of acids.—J. Am. Chem. Soc. 1917, v. 39, p. 124–136.

Kolthoff, I. M.: Observations on the qualitative determination of the different carbohydrates.—Pharm. Weekblad. 1917, v. 54, p. 205–214.

Anon.: Reactions for the detection of naphthalene and benzoic acid, when they occur as impurities in benzonaphthol, are described.—Gaceta farm. Espan., July, 1916, through Ann. chim. analyt. 1917, v. 22, p. 100.

Anon.: A book review of a volume by R. Kobert entitled *New Investigations on the Identification of the Saponins.*—Pharm. Weekblad, 1917, v. 54, p. 195.

SUGAR

Colin, H., and Liévre, O.: A description of a method for the determination of aldehyde sugars by means of iodine in an alkaline medium.—Bull. soc. chim. France, 1917, v. 21, p. 403–405.

Bougault, J.: Some observations on Romijn's process for the determination of aldose sugars based on the action of iodine in the presence of borax.—J. pharm. et chim. 1917, v. 16, p. 313–314.

Fischer, Martin H., and Hooker, Marian O.: An article dealing with the colloidal chemistry of the Fehling test.—Science, 1917, v. 45, p. 505–507.

López, Eusebio: A modification of Fehling's method for the estimation of sugar in which potassium cyanide is employed, is described. The method is stated to be applicable to the estimation of dextrose, invert sugar, maltose, and lactose.—Anal. fis. quim. 1917, v. 15, p. 248–251, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 514.

Frerichs, G., and Mannheim, E.: A comparison of the Rupp and Lehmann's iodometric method of estimating reducing sugars with the Fehling-Soxhlet method. The former is preferred.—Arch. Pharm. 1916, v. 254, p. 138–148, through Analyst, 1917, v. 42, p. [illegible].

Rolle, J.: A description of an oxidimetric method for the estimation of cuprous oxide precipitated in the analysis of sugar with Fehling's solution.—Chem. Zentralbl. 1916, v. 2, p. 693–694, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 104.

Guglialmelli, Luis: A description of a new reaction for the differentiation of sugars. The test is based on the fact that there is an intimate relation between the production of fluorescence and the formation of furfural.—Rev. farm. 1917, v. 60, p. 442–446.

Rose, A. R.: An account of the inversion and determination of cane sugar by means of picric acid and a modified Lewis-Benedict colorimetric method.—Proc. Soc. Exper. Biol. Med. 1917, v. 15, p. 16–17.

Schoorl, N., and Kolthoff, I. M.: A review of methods for estimating sugar in which the use of potassium iodide is avoided or the amount of the salt required is small.—Pharm. Weekblad, 1917, v. 54, p. 949–953.

12. DIAGNOSTIC REAGENTS AND CLINICAL TESTS.

Dean, J. Atlee: An outline of the proper methods for the collection of material for the clinical laboratory, with special reference to the necessity of delivering material that will, upon examination, reveal the true conditions.—J. Am. Pharm. Assoc. 1917, v. 5, p. 15–17.

Diner, Jacob: Some antiquated diagnostical reagents and clinical tests have been incorporated in the U. S. P., IX, while others, more up to date and more satisfactory from the point of view of the laboratory worker, have been omitted.—J. Am. Pharm. Assoc. 1917, v. 6, p. 613.

Diner, Jacob: The U. S. P. does not call attention to the fact that sodium nitrite solution will be converted into a nitrate solution on standing and will then give negative results in positive cases. This solution should be freshly prepared when needed, but when kept in well-stoppered bottles, removed from light, may be of service for about a month.—J. Am. Pharm. Assoc. 1917, v. 6, p. 613.

Anon.: A review of recent developments in methods for the examination of the urine, stomach contents, feces, and sputum.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 293–297, 604–607.

Cammidge, P. J.: A description of an improved method for the estimation of sugar in urine and blood.—Lancet, 1917, v. 192, p. 613.

Thomas, B. A., and Birdsall, J. C.: A discussion of comparative results of various functional kidney tests based on a series of cases.—J. Am. M. Assoc. 1917, v. 69, p. 1747–1752.

Foster, Curtis S., and Kahn, Max: A study of the tests of liver function.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 25–36.

Harding, Victor J., and Mason, Edward H.: A description of a modification of the McLean and Van Slyke method for the estimation of chlorides in body fluids, in which the proteins of the blood are removed by copper sulphate and sodium hydroxide instead of Merck's blood charcoal.—J. Biol. Chem. 1917, v. 31, p. 55–58.

Heiberg, K. A.: A discussion of the present status of our means for determining the extent of acidosis in diabetes. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 1672.

Thevenon and Rolland: A method for the detection of blood in urine, fecal matters, and pathological fluids depends on the formation of a violet color when the materials containing blood are acted upon by an alcoholic solution of pyramidone in the presence of acetic acid and hydrogen peroxide.—J. pharm. et chim. 1917, v. 16, p. 18–19.

URINE

Cordier, Lucien: Two methods for the destruction of organic substances in urine are described.—J. pharm. et chim. 1917, v. 16, p. [illegible].

Jespersen, K.: Charts showing the differences in day and night urine.—J. Am. M. Assoc. 1917, v. 68, p. 588.

Maestre, Modesto: A number of short descriptions of methods for the identification of medicinal substances in the urine.—Farm. Españ. 1917, v. 49, p. 264–265, 279–281.

Petzetakis, M.: A description of a new iodine color reaction given by the urine of patients suffering with tuberculosis, typhoid fever, scarlet fever, and erysipelas, and after medication with salvarsan and some other drugs.—Physiol. Abstr. 1917, v. 2, p. 129.

Verda, Lugano A.: Some observations on the iodo-reaction of Petzetakis for the diagnosis of pulmonary tuberculosis and typhoid fever.—Répert. pharm. 1917, v. 28, part 2, p. 246–249; Schweiz. Apoth.-Ztg. 1917, v. 55, p. 321–324, 334–337.

Richet, Ch., and Cardot, H.: A description of a new method for the estimation of reducing materials in urine. The authors propose to determine the manganic index.—Compt. rend. acad. sc. 1917, v. 165, p. 258.

Dumitrescu, G.: Investigations concerning the colloidal nitrogen content of normal and pathological urine.—Chem. Abstr. 1917, v. 11, p. [illegible].

Ljungdahl, Malte: A modification of Kjeldahl's method for the determination of nitrogen adapted to small quantities of urine (1 cubic centimeter) is described.—Biochem. Ztschr. 1917, v. 83, p. 115–119 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 578.

Pearce, Roy G.: A review of the Folin and Denis methods for the determination of nitrogen in the urine and blood by direct Nesslerization.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 130–134.

Krogh, Marie: A description of a [illegible] method for the determination of nitrogen in urine.—Chem. Abstr. 1917, v. 11, p. 460.

Pottinger, Joseph E.: Notes on some technical difficulties involved in the comparison of the diazo and urobilinogen tests.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 37–41.

Mayeda: Observations on the diazo reaction in measles. Both the diazo and the urobilinogen test were positive in about 90 per cent of the cases.—Chem. Abstr. 1917, v. 11, p. [illegible].

Anon.: The diazo test has been declared useless in the diagnosis of typhoid fever by the diagnostic laboratory of the New York State

Health Department. The laboratory reports that less than 250 samples out of nearly 1,700 specimens submitted last year gave positive reactions.—Drug. Circ. 1917, v. 61, p. 410.

Weiss, M.: For the determination of urochromogen titration with centinormal potassium permanganate solution until the maximal color is reached is recommended.—Biochem. Ztschr. 1917, v. 81, p. 342–355, through Physiol. Abstr. 1917, v. 2, p. 613.

Zucker and Ruge: The technique of the urochromogen reaction is described in detail.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 295.

Weiss, Rich.: The estimation of ammonia and sulphur compounds in urine. Malfattis's method of estimating ammonia in urine is recommended for use by physicians. Approximate methods for estimating sulphur compounds in urine are described.—Münch. med. Wchnschr. 1916, v. 63, p. 1547–1548, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 217.

Klason, Peter: Data showing the normal content of arsenic in urine as determined by a method described by the author. Amounts varying between 0.005 and 0.0125 milligram per liter were found.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 186.

Freymuth: A negative result with Abelin's test does not prove the absence of arsenic from the urine of patients receiving salvarsan. The Marsh test, after destruction of the organic matter, is more reliable.—Apoth.-Ztg. 1916, v. 31, p. 387, through Physiol. Abstr. 1917, v. 2, p. 430.

Bang, Ivar: A description of a method for the quantitative determination of arsenic in the urine. An abstract.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 593.

Widmark, E. M. P.: A description of a modification of the Nicloux method for estimating ethyl alcohol in urine.—Skand. Arch. Physiol. 1916, v. 35, p. 125–130, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 547.

Villedieu and Hébert: A description of a method for the estimation of ethyl alcohol in dilute solutions (1 to 10 per thousand), with a discussion of the applicability of this method for the estimation of alcohol in the urine.—Rev. Farm. 1917, v. 60, p. 423–425.

Moore, B.: Observations on Webster's test for trinitrotoluene poisoning.—Pharm. J. 1917, v. 98, p. 9.

Lutz, L., and Baume, G.: A description of a method for the identification of dinitrophenol in the urine.—Compt. rend. soc. biol. 1917, v. 80, p. 483–485.

Lutz, L.: A description of a rare form of tricalcium phosphate found in urine.—Bull. sc. pharmacol. 1917, v. 24, p. 335–337.

Lenk, E.: Rapid methods for the quantitative determination of albumin and sugar in urine are described.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 45–48.

Grimbert, L.: Observations on the determination of cryogenine in the urine.—J. pharm. et chim. 1917, v. 15, p. 305–306; see also Ed. Justin-Mueller, v. 16, p. 52.

Gulley, W. F.: Observations on the occurrence and significance of creatinine in urine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1045–1046.

François, Maurice: Notes on the detection of alkaloids in the urine, with special reference to the detection of emetine.—J. pharm. et chim. 1917, v. 16, p. 211–216.

Pepin, G.: A note on the value of Tanret's reagent for the detection of quinine in urine.—Bull. sc. pharmacol. 1917, v. 24, p. 357–358.

Folin, Otto, and Doisy, E. A.: A report of investigations showing that impure picric acid may be a source of error in creatine and creatinine determinations.—J. Biol. Chem. 1917, v. 28, p. 349–356.

Esperamo, L.: A method for the detection of formaldehyde in urine is described. The method is based on the color reaction produced after treating the urine with phenylhydrazine hydrochloride and sodium nitroprusside. An abstract.—Boll. chim.-farm. 1917, v. 56, p. 540.

Borrien, V.: A study of the occurrence and detection of erythrin in the urine.—J. pharm. et chim. 1917, v. 16, p. 45–51.

Angiolani, Argeo: A description of a new volumetric method for the estimation of phosphates in urine.—Giorn. farm. chim. 1917, v. 66, p. 251–252.

Tribondeau: A method for the detection of methylene blue in urine consists of acidifying the latter with citric acid, adding a small amount of thymol and heating the mixture. The thymol collects on the surface, carrying with it the pigment.—Compt. rend. soc. biol. 1917, v. 80, p. 882.

W. C. de G.: A book review calls attention to a volume on urinalyses by P. E. Alessandri. The work is in Italian and is entitled *L'analisi chimica e microscopica con criteri di apprezzamento diagnostico, ad uso dei medici, dei chimici et dei farmacisti.*—Chem. Weekblad 1917, v. 14, p. 761.

Raubenheimer, Otto: A short review of a small volume by B. G. R. Williams, entitled *Practical Urinalysis*, states that the work should be useful to pharmacists.—D. A. Apoth. Ztg. 1917, v. 38, p. 70.

Raubenheimer, Otto: A review of a volume by R. B. H. Gradwohl and A. J. Blaivas, entitled *The Newer Methods of Blood and Urine Chemistry*, states that the book should be of value to those pharmacists who make blood and urine analyses.—D. A. Apoth. Ztg. 1917, v. 38, p. 112.

P. M.: A review of the fifth edition of a work by Lassar Cohn, entitled *Praxis der Harnanalyse*.—Chem. Weekblad. 1917, v. 14, p. 271.

ACIDITY.

Dehn, William N.: Accurate methods for the determination of the total acidity of urine are described.—J. Am. Chem. Soc. 1917, v. 39, p. 2726–2733.

Barret, Harvey P.: A modification of Gerhardt's test for diacetic acid in urine is described.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 202–203 and 266–269.

Maver, Mary E.: From an investigation it is concluded that the Schneyer method for the determination of lactic acid in urine gives results which are too high, due to the fact that other constituents, such as hippuric acid and conjugate glucuronates, also react to yield CO under the conditions of the determination.—J. Biol. Chem. 1917, v. 32, p. 71–76.

Amberg, S., and McClure, W. B.: Citric acid can be detected in human urine by Kunz's pentabromoacetone method or by Salant and Wise's method. Preliminary experiments indicate that about 500 milligrams of citric acid are voided daily in the urine.—Am. J. Physiol. 1917, v. 44, p. 453–462.

Rozier, F.: Some observations on the detection of picric acid in urine by means of methylene blue. Bull. sc. pharmacol. 1917, v. 24, p. 81–82.

Pecker, Henri: A method for the detection of picric acid in urine depends on the fact that picric or picramic acids, if present, give a red coloration when the urine is rendered ammoniacal and brought into contact with ferrous sulphate-tartaric acid solution.—J. pharm. et chim. 1917, v. 15, p. 70–74.

ACETONE.

Ljungdahl, Malte: A method for the estimation of acetone in urine consists in distilling off the latter by means of steam and determining it iodometrically in the distillate. –Biochem. Ztschr. 1917, v. 83, p. 103–114, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 584.

Sabel: A gravimetric method for the determination of acetone in urine. The acetone is converted into methyl iodide, which is then treated with nitric acid and silver nitrate. The weight of the silver iodide after drying, multiplied by the factor 0.117, gives the amount of acetone present. Giorn. farm. chim. 1917, v. 66, p. 27.

Lenk, Emil: A description of an iodometric method for the estimation of acetone substances in urine.—Biochem. Ztschr. 1916, v. 78, p. 224–230, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 399.

Engfeldt, N. O.: A modified Lenk method for the estimation of acetone substitutes in urine, together with an altered procedure for a separate estimation of acetone and acetoacetic acid in urine, is described in detail.—Ztschr. physiol. Chem. 1917, v. 100, p. 93-110, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 550.

Longo, G. A description of a nephelometric method for the quantitative determination of acetone in urine.—Giorn. farm. chim. 1917, v. 66, p. 301-303.

ALBUMIN.

Bové, A., and Guyot, R. A report of chemical and clinical investigations relative to the presence of acid-soluble albumin in urine.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 326-348.

Edelmann, Adolf. The employment of an aqueous solution of resorcinol is recommended as a test for albumin in urine in military practice.—Wien. klin. Wchnschr. 1916, v. 29, p. 901, through Physiol. Abstr. 1917, v. 2, p. 54.

Aufrecht. A description of a new method for the detection of albumin in urine. The test depends on the formation of a ring when urine is poured onto sodium chloride solution previously made acid with a small quantity of nitric acid.—Pharm. Ztg. 1917, v. 62, p. 38, through J. Chem. Soc. Lond. 1917, v. 112, No. 2, p. 227-228.

Justin-Mueller, Ed. A rapid method for the determination of albumin in urine. The method is based on the property of albumin, which permits the formation of a compound with potassium ferrocyanide.—Bull. sc. pharmacol. 1917, v. 24, p. 29-32.

Borrien, V. A criticism of Ed. Justin-Mueller's rapid volumetric clinical method for the determination of albumin.—J. pharm. et chim. 1917, v. 16, p. 333-336.

Lenz, F. A description of a simple method for the detection of albumin in urine. Sulphosalicylic acid is the reagent recommended for use.—Munch. med. Wchnschr. 1917, v. 64, p. 1267, through Physiol. Abstr. 1917, v. 2, p. 613.

Pötjen and Steffenhagen. A description of a method for the detection of albumin in urine by the use of bleaching-powder solution and hydrochloric acid.—Deutsch. med. Wchnschr. 1917, v. 43, p. 530, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 520.

Kirke. From an investigation of Pandy's reaction for the detection of albumin in urine it is concluded that this method is not sufficiently sensitive. The limit at which a distinct reaction is obtained is about 0.2 per cent.—Chem. Zentralbl. 1916, v. 2, p. 697, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 110.

Fredlous and Lapeyre. Some observations on the determination of albumin in urine by means of Maurel's reagent.—Repert. pharm. 1917, v. 28, part 2, p. 67-69.

Fredlous and Lapeyre, X. A description of a method for the detection of egg albumin in urine.—Bull. Soc. pharm. Bordeaux 1917, v. 55, p. 39-45.

Hollande, A.-Ch.: Remarks concerning the detection of ovalbumin in urine by means of a serum prepared from rabbits which have been injected with the white of an egg.- J. pharm. et chim. 1917, v. 15, p. 65–70.

AMMONIA.

Leclère, A.: A method for the determination of ammonia in urine is based on the fact that lithium carbonate acts but feebly on the urea present, but slightly on the amino acids and completely decomposes the salts of ammonia with the liberation of NH_3. The liberated ammonia is distilled into a standard acid solution and the uncombined acid titrated in the usual manner.—Compt. rend. soc. biol. 1917, v. 80, p. 959–962.

Folin, O. and Bell, R. D.: The authors recommend synthetic zeolite (permutit) as a substitute for Merck's purified blood charcoal in the method for the estimation of ammonia in urine as previously described.—J. Biol. Chem. 1917, v. 29, p. 329–335.

BILE.

Kallos, Josef.: If 5 to 8 cubic centimeters of urine are shaken with 1 to 2 cubic centimeters of dilute hydrochloric acid, and 2 to 3 drops of potassium or sodium nitrite are added, a pale to olive green coloration will develop, depending on the quantity of bile pigment present. —Deutsch. med. Wchnschr. 1917, v. 46, p. 751, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 555.

DeJager, L.: A description of a modified Van Huppert method for the detection of bile pigments in the urine.—Ned. Tijdschr. Gen. 1916, p. 2271, through Pharm. Weekblad, 1917, v. 54, p. 218.

Rosenberg: A method for the detection of bile coloring matter in urine depends on the color reaction which results upon the addition of potassium hydroxide solution and copper sulphate solution.— Schweiz. Apoth.-Ztg. 1917, v. 55, p. 293.

BLOOD.

Thevonon and Rolland: A description of a new color reaction for the detection of blood in urine, fecal matter, and pathologic liquids. The reaction is based upon the violet coloration produced by pyramidon in the presence of oxidizing agents.—J. pharm. et chim. 1917, v. 16, p. 18–20.

Justin-Mueller, Ed.: A description of a simplified process for the preparation of the phenolphthalein reagent for the detection of blood in urine.—J. pharm. et chim. 1917, v. 16, p. 20.

Diner, Jacob: The U. S. P. formula prescribes a 2 per cent solution of guaiac in dehydrated alcohol for use in the blood reaction. This solution deteriorates very rapidly and becomes useless. The use of dehydrated alcohol is unnecessary. If one were directed to shake a piece of guaiac in U. S. P. alcohol until a greenish solution was obtained, and to use it while fresh, positive results would be obtained in every case where blood was present.—J. Am. Pharm. Assoc. 1917, v. 6, p. 613.

CHLORIDES

Hedinschka, A.: Repeated experiments have convinced the author of the necessity of removing proteins before titrating the chlorine in urine by the modified Volhard's method.—Chem. Zentralbl. 1916, v. 2, p. 347, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 38.

Franzos, Julius: A description of a method for determining the chlorides in urine by means of the Strauss chloridometer.—Pharm. Post, 1917, v. 50, p. 93.

INDICAN.

Askenstedt, F. C.: An improved test for indican in urine. The urine is diluted to a density of 1.005, warmed, and shaken with chloroform. Obermayer's reagent is then added and the indigo shaken into the chloroform. If the latter remains colorless or only shows a trace of blue, the urine is normal.—J. Lab. & Clin. Med. 1917, v. 2, p. 578-580.

Justin-Mueller, Ed.: Experimental researches on the substances present in the urine which are instrumental in the formation of the indigoid pigments.—J. pharm. et chim. 1917, v. 15, p. 249-256.

SULPHUR

Givens, Maurice H.: A note on Benedict's method for the estimation of total sulphur in urine.—J. Biol. Chem. 1917, v. 29, p. 15-17.

Hamburger, H. J.: A description of an improved and simplified micro method for the determination of sulphur in urine.—Ztschr. physiol. Chem. 1917, v. 100, p. 221-240.

Cordier, Lucien: A criticism of the Salkowski method for the determination of sulphuric esters in urine. The method is stated to yield low results.—J. pharm. et chim. 1917, v. 16, p. 360-363.

SUGAR

Diner, Jacob: The failure of the U. S. P. to mention Benedict's solutions, both the qualitative and the quantitative, is a serious omission. The former has all the advantages of Fehling's solution, in addition to having better keeping qualities and doing away with the necessity of having two solutions, which may be incorrectly mixed (failure to add sufficient alkali). The quantitative solution of Benedict is equally efficient and affords a better end point reaction.—J. Am. Pharm. Assoc. 1917, v. 6, p. 613.

Hiller, Alma: An adaptation of the Lewis and Benedict method for sugar and the estimation of very small quantities of sugar in urine.—J. Biol. Chem. 1917, v. 30, p. 125-127.

Burmann, James: A description of a modified Fehling's method for the estimation of dextrose in urine. The use of complex apparatus is avoided by employing a normal drop counter and a graduated test tube.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 196–199.

Lenk, Emil: A modification of Fehling's method for the estimation of sugar is described. The addition of 1 milligram of magnesium sulphate to each cubic centimeter of the copper sulphate solution is recommended, as this insures rapid sedimentation of the colloidal cuprous oxide.—Deutsch. med. Wchnschr. 1917, v. 43, p. 43–44 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 341–342.

Ruoss: Notes on some modifications of the Fehling method for the estimation of sugar in urine.—Ztschr. analyt. Chem. 1917, v. 56, p. 369–384, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 549.

Vanino, L., and Bertels, F.: For the estimation of sugar in urine, the forgotten method of the French physician, Duhomme, is found to be suitable for clinical purposes. The method is described in detail.—J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 342.

Wolf, Kuo: Lenk's modification of Fehling's method for then estimation of sugar is found to be sufficiently accurate for the estimation of sugar in urine.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 80, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 514.

Vansteenberghe and Banzil: For the determination of glucose in urine or blood, an excess of Fehling's solution is added, the mixture filtered through talc, and the excess of copper titrated with potassium cyanide.—Physiol. Abstr. 1917, v. 2, p. 121.

Gaillard and Fabre: A discussion of the methods of estimating glucose in the urine when accompanied by maltose dextrin. -J. pharm. et chim. 1917, v. 16, p. 129–137.

Cammidge, P. J.: A description of a modified Scales's method for the volumetric determination of sugar in the urine and blood.—Lancet. 1917, v. 2, p. 613–614.

Frerichs, G., and Mannheim, E.: A report of investigations to determine quantitatively the dextrose in urine. The authors prefer Rupp and Lehmann's iodometric method for estimating reducing sugars to the Fehling-Soxhlet method.—Arch. Pharm. 1916, v. 254, p. 138–148, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 393.

Gurtov, J. J.: A new method for the determination of glucose in urine. The reagent employed consists of a solution containing copper sulphate, potassium ferricyanide, sodium thiosulphate, sodium carbonate, and sodium acetate.—Med. Rec. 1917, v. 92, p. 502–503.

Klein: A stable solution for the detection of sugar in urine is made by dissolving 0.25 gram of copper acetate in 50 cubic centimeters of solution of lead subacetate.—Pharm. Zentralhl. 1917, v. 58, p. 412.

Hiller, Alma. The identification of the pentose in a case of pentosuria.—J. Biol. Chem. 1917, v. 30, p. 129–134.

Bougault, J. In a note on the determination of the aldehyde sugars by means of iodine in the presence of alkali the author calls attention to the fact that the method was first made known by Romijn in 1897.—J. pharm. et chim. 1917, v. 16, p. 313.

UREA

von Horvath, Béla, and [illegible], Heinrich. A criticism of the method of Hahn for the determination of urea by means of urease.—Deutsch. med. Wchnschr. 1916, v. 42, p. 414–416, through Chem. Zentralbl. 1916, v. 2, p. 997–998.

Fosse. A description of a method for the determination of urea, which consists of weighing the latter in combination with xanthydrol. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 178–179.

Anon. A discussion of the Fosse method for the estimation of urea in urine. The method is based on the use of xanthydrol.—J. pharm. et chim. 1917, v. 15, p. 256–260.

Lewis, D. Sclater. Experimental data showing the clinical value of Ambard's coefficient of urea excretion.—Arch. Int. Med. 1917, v. 19, p. 1–52.

Moulès, L., and Bouvet, J. A note on the employment of the English burette for the estimation of urea in urine, blood, and pathological serums.—Bull. Soc. pharm. Bordeaux 1917, v. 55, p. 235–239.

URIC ACID

Angiolani, A. For the quantitative estimation of uric acid, 250 cubic centimeters of urine are mixed with 10 cubic centimeters of concentrated hydrochloric acid and allowed to stand for 24 hours. Collect the crystals on a filter, dissolve in 20 to 25 cubic centimeters of 10 per cent potassium hydroxide solution, acidify with sulphuric acid, and titrate with permanganate solution.—Policlinico 1917, v. 24, p. 415, through Physiol. Abstr. 1917, v. 2, p. 266.

Bogert, L. Jean. A note on modifications of the colorimetric method for the determination of uric acid in urine and in blood.—J. Biol. Chem. 1917, v. 31, p. 165–171.

Morris, J. L. A detailed description of a rapid titration method for determining small amounts of uric acid in urine. By precipitating the uric acid as [illegible] urate, substances which might interfere with the subsequent permanganate oxidation are eliminated.—J. Biol. Chem. 1917, v. 29, p. 13.

FECES

Field, [illegible]. A review of the various methods for detecting blood in feces, (1) by means of the use of guaiac, reduced solutions of malachite-green, phenolphthalein, etc. A new test with a reagent made from rhodamine-B is also described.—Biochem. Ztschr. 1917, v. 79, p. 241–256, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 228.

Rapin, A.: A note calling attention to the possibility of an error in the detection of blood in the feces due to the presence of charcoal.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 175–176.

Sapper: A description of a method for the detection of blood in feces. –Schweiz. Apoth.-Ztg. 1917, v. 55, p. 296–297.

Hall, M. C.: A detailed description of a method for disintegrating and microscopically examining feces for parasites, etc.—J. Lab. & Clin. Med. 1917, v. 2, p. 347–352.

Bergein, Olaf: Researches on the determination of fecal indole.—J. Biol. Chem. 1917, v. 32, p. 17–22.

Sharpe, John S.: A description of a rapid process for the estimation of the higher fatty acids and soaps in feces. Biochem. J. 1917, v. 11, p. 96–100.

Ducung and Moreau: A report of investigations relative to the determination of fatty substances in feces.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 349–352.

Donaldson, R.: A description of a process for the detection of protozoal cysts in feces by means of wet stained preparations.—Lancet, 1917, v. 192, p. 571.

GASTRIC CONTENTS.

Diner, Jacob: Alizarin solution is used as an indicator for determining all but the combined hydrochloric acid, and should therefore be included in the U. S. P. list of reagents for the examination of the gastric contents.—J. Am. Pharm. Assoc. 1917, v. 6, p. 614.

Kolthoff, I. M.: Notes on the chemical analysis of gastric contents, with special reference to the determination of hydrogen-ion concentration.—Pharm. Weekbl. 1917, v. 54, p. 1192–1200 and 1253–1258.

Grundmann: The best method for the detection of blood in stomach contents and feces is stated to be the guaiac-turpentine test.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 296.

BLOOD.

Tribondeau: Procedures for collecting blood for biological tests are described and classified.—Arch. med. et pharm. nav. 1917, v. 103, p. 63–65.

Josué, O., and Parturier, M.: Experimental data, with a discussion of the methods of determining viscosity of the blood.—Chem. Abstr. 1917, v. 11, p. 60; see also J. Am. M. Assoc. 1916, v. 67, p. 1048.

Ottenberg, Reuben, and Rosenthal, Nathan: A description of a new and simple method for counting blood platelets.—J. Am. M. Assoc. 1917, v. 69, p. 999.

Krauss, William: A method for staining blood, especially for plasmodia. The technique of preparing the stain and conducting the test is described in detail.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 138.

McClendon, J. F., Shedlov, A., and Thompson, W.: Tables for finding the alkaline reserve of blood serum, in health and in acidosis, from the total CO_2 or the aveolar CO_2 or $_pH$ at known CO_2 tension.—J. Biol. Chem. 1917, v. 31, p. 519–525.

Guyot, R.: A discussion of the hæmaturias of parasitic origin, including descriptions of a number of tests for the identification of blood.—J. pharm. et chim. 1917, v. 16, p. 8–18.

Stokes, William R., and Stoner, H. W.: A report on the use of the precipitin test for the detection of human blood in criminal trials.—Boston M. & S. J. 1917, v. 177, p. 65–72.

Vaughan, Warren T.: Notes on the Wagner benzidin test for occult blood.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 437–442.

Marriott, W. McKim, and Howland, John: A description of a micromethod for the determination of calcium and magnesium in blood serum.—J. Biol. Chem. 1917, v. 32, p. 233–240.

Halverson, John O., and Bergeim, Olaf: Researches on the determination of small amounts of calcium, particularly in the blood.—J. Biol. Chem. 1917, v. 32, p. 159–170.

Lyman, Henry: A description of a rapid method for determining calcium in blood and milk.—J. Biol. Chem. 1917, v. 29, p. 169–178.

Van Slyke, Donald E., and Fitz, Reginald: Studies of acidosis. VIII. The determination of β-hydroxybutyric acid, acetoacetic acid, and acetone in blood.—J. Biol. Chem. 1917, v. 32, p. 495–497.

Kingsbury, F. B., and Sedgwick, J. P.: A report of investigations to determine the uric acid content of the blood of newborns.—J. Biol. Chem. 1917, v. 31, p. 261–268.

Gettler, Alexander O.: Some factors involving the accuracy of creatinine determinations in human blood.—J. Biol. Chem. 1917, v. 29, p. 47–56.

Hunter, Andrew, and Campbell, Walter R.: The probable accuracy, in whole blood and plasma, of colorimetric determinations of creatinine and creatine.—J. Biol. Chem. 1917, v. 32, p. 195–231.

Folin, O., and Doisy, E. A.: Notes on impure picric acid as a source of error in the determination of creatine and creatinine in the blood.—J. Biol. Chem. 1917, v. 28, p. 349–356.

Clogne, René: A report of experiments with phosphotungstic acid in the preparation of blood or cephalo-rachidian liquors for the determination of urea.—J. pharm. et chim. 1917, v. 16, p. 326–332.

Fouchet, A.: A new method for the detection and quantitative determination of bile pigments in the blood serum. The reagent employed consists of trichloracetic acid, 5 grams; water, 20 cubic centimeters; and perchloride of iron (officinal), 2 cubic centimeters. Bile pigments give a bluish-green color with this reagent. -Compt. rend. soc. biol. 1917, v. 80, p. 826–828.

Laudat, M.: A description of a method for the quantitative estimation of chlorine in the blood serum and albuminous liquids of the body. –J. pharm. et chim. 1917, v. 16, p. 168–171.

Foster, G. L.: A modification of the McLean-Van Slyke method for the estimation of chloride in blood. The modification consists in the precipitation of the proteins of the blood by treatment with metaphosphoric acid instead of by heat and blood charcoal.—J. Biol. Chem. 1917, v. 31, p. 483–485.

McGuigan, Hugh: Notes on the use of Fehling's solution in the determination of blood sugar.—J. Lab. & Clin. Med. 1916–17, v. 2, p. 514–516.

Wolf, C. G. L., and Ball, W. C.: A criticism of the ordinary methods for the estimation of sugar in blood plus a description of a process making use of the formation of ferric thiocyanate as the end point.—Physiol. Abstr. 1917, v. 2, p. 40.

Rainy, Harry, and Hawick, Christina M.: A discussion of clinical methods for the estimation of sugar in blood. A number of analytical details are also given.—Chem. Abstr. 1917, v. 11, p. 3287.

Bauzil and Boyer: A report of researches on the determination of glucose in the blood.—J. pharm. et. chim. 1917, v. 16, p. 171–179.

Tixier, Leon: A method for the detection of picric acid in the blood in the case of simulated icterus. The method is based on the color reaction with methylene blue.—Bull. sc. pharmacol. 1917, v. 24, p. 155–159.

Anon.: A book review calls attention to a volume by Ivar Bang on microchemical methods for the determination of certain constituents of the blood.—Pharm. Weekblad, 1917, v. 54, p. 219.

STAINS.

Smith, A. R.: Notes on special methods for staining microorganisms.—Pharm. J. 1917, v. 98, p. 84–85.

Tribondeau, L.: A review of several contributions on microscopic staining which were made during the past few years in collaboration with M. Fichet and J. Dubreuil.—Ann. Inst. Pasteur, 1917, v. 31, p. 412–435.

Diner, Jacob: Gram's stain, as described in the U. S. P., is very unstable and has to be made fresh at least every week, if not oftener. The adoption of the Nicolle's modification of this stain would materially aid the laboratory man, inasmuch as it is easily made and almost indestructible as far as time and exposure are concerned.—J. Am. Pharm. Assoc. 1917, v. 6, p. 614.

Tribondeau, L., and Dubreuil, J.: Directions for the preparation of substitutes for Giemsa's stains from methylene blue.—Compt. rend. acad. sc. 1917, v. 164, p. 551–553.

Goodpasture, E. W.: Directions for the preparation of an acid polychrome methylene blue solution for routine and special staining.—J. Am. M. Assoc. 1917, v. 69, p. 998.

Gordon, A. K.: A note on the value of Biebrich scarlet as a plasma stain.—Brit. M. J. 1917, v. 1, p. 828.

Hornvold, A. G.: A formula for the preparation of a haematoxylon stain.—J. Roy. Micros. Soc. 1917, p. 167–168.

Lewis, Paul A., and Krauss, Robert B.: Notes on the preparation of parafuchsin as a stain for tubercle bacilli.—Chem. Abstr. 1917, v. 11, p. 2479.

Mori: A description of a new method for the rapid staining of tubercle bacilli.—Med. Rev. 1917, p. 458, through Year Book of Pharmacy, 1917, p. 39.

Tribondeau, L.: A note on the staining of tubercle bacilli by the method of Ziehl-Neelsen.—Compt. rend. soc. biol. 1917, v. 80, p. 780–782.

Merian, Louis E.: Notes on the use of a copying ink pencil for microscopic staining.—Lancet, 1917, May, p. 744.

Martin, L., et al.: Notes on the method of Loffler and van Ermenghen for staining the spirochaetes of hemorrhagic icterus.—Compt. rend. soc. biol. 1916, v. 79, p. 1053.

Cutler, D. W., and Williamson, R.: A 1 in 10,000 solution of neutral red in 0.85 per cent sodium chloride solution is used as a stain for differentiating the amoeboid forms of *Entamoeba histolytica* from those of *Entamoeba coli*.—J. Path. & Bact. 1917, v. 21, p. 511–513.

Hage: A description of the silver method of Fontana for the demonstration of *Spirochaete Pallida*.—Chem. Abstr. 1917, v. 11, p. 1662.

Watabiki, T.: Directions for preparing a solution for staining protozoa and blood corpuscles.—Kitasato Arch. Exper. Med. 1917, 1, p. 153–156 through J. Roy. Micros. Soc. 1917, p. 635.

CULTURE MEDIA

Wright, J. H.: A paper dealing with the importance of the employment of uniform culture media in the bacteriological examination of disinfectants.—J. Bact. 1917, v. 2, p. 315–346.

Clark, W. M., and Lubs, H. A.: A discussion of colorimetric determinations of hydrogen ion concentration and its applications in bacteriology.—J. Bact. 1917, v. 2, p. 1–34.

Kligler, I. J.: An investigation of the effect of hydrogen ion concentration on the production of precipitates in a solution of peptone and its relation to the nutritive value of media.—J. Bact. 1917, v. 2, p. 351–353.

Conn, H. J., and Dotterrer, W. D.: A comparison of agar and gelatin as media for the plate method of counting bacteria.—Chem. Abstr. 1917, v. 11, p. 824.

Mudge, C. S.: An investigation of the effect of sterilization upon sugars in culture media.—J. Bact. 1917, v. 2, p. 403–415.

Owen, R. G., et al: A preliminary report on trypsin broth, an ideal medium for making blood cultures.—J. Lab. & Clin. Med. 1916–17, v. 2, p. 198–199.

Berthelot, Albert: An account of the use of a proteolytic peptone from meat and intestinal mucosa in the preparation of culture media.—Compt. rend. soc. biol. 1917, v. 80, p. 298–300.

Tanaka, D.: A note on the preparation of a culture medium from dried pollach (*Gadus pollachins*).—Chem. Abstr. 1917, v. 11, p. 2913.

Wallis, R. L., Mackenzie: A substitute for "neutrose" is prepared from casein, peanut flour, and sodium carbonate.—Agric. J. India, 1917, v. 12, p. 621–632, through Chem. Abstr. 1918, v. 12, p. 493.

Berthelot, Albert: A note on the use of a vegetable boullion as a culture media. Potatoes, carrots, and turnips are used in the preparation of the boullion.—Compt. rend. soc. biol. 1917, v. 80, p. 131–132.

Kelser, Raymond A.: A method for the preparation of culture media from whole blood is given in detail.—J. Bact. 1917, v. 1, p. 615–617.

Krumwiede, C., jr., and Khon, L. A.: A method for the preparation of a triple-sugar modification of the Russell double-sugar medium is given.—J. Med. Res. 1917, v. 37, p. 225–227.

Clark, William Mansfield, and Lubs, Herbert A.: A report on the comparative value of litmus and bromcresol purple in milk cultures.—J. Agric. Res. 1917, v. 10, p. 105–111.

Fildes, P.: The technique of the preparation of culture media containing albuminous foods, with special reference to those intended for the growth of the meningococcus.—Lancet, 1917, v. 1, p. 492–493.

Lloyd, Dorothy J.: A discussion of the chemical factors involved in the growth of the meningococcus. The presence of vitamines are necessary for its primary growth in vitro.—Brit. M. J. 1917, v. 1, p. 11–12.

Teague, Oscar, and Clurman, A. W.: A description of a fluid enrichment medium for the isolation of typhoid bacilli from stools.—J. Med. Res. 1916, v. 35, p. 107–130.

Kligler, I. J.: A medium for the differentiation of members of the typhoid-paratyphoid group consists of meat infusion agar containing about 0.75 per cent of agar, 0.1 per cent of glucose, and 0.05 per cent of lead acetate.—Am. J. Public Health, 1917, v. 7, p. 1042–1044.

Botelho, C.: A description of a new culture media for the rapid detection of the presence of bacilli of the typhus group in bacteriologically impure media.—Compt. rend. soc. biol., 1917, v. 80, p. 135–137.

Watabiki, T.: A description of a method for the preparation of whey media for the cultivation of gonococcus.—J. Path. & Bact., 1917, v. 20, p. 408.

Thomson, D.: A new culture media for gonococcus in which human plasma and Ringer's solution are substituted for the whole blood and sodium chloride usually employed.—Brit. M. J., 1917, v. 1, p. 869–870.

Cole, Sydney W., and Lloyd, Dorothy J.: Descriptions of two methods for the preparation of solid and liquid culture media for the cultivation of gonococcus.—J. Path. & Bact., 1917, v. 21, p. 267–285.

Seiffert, G., and Bamberger, H.: Notes on the chemistry of cholera culture media.—Arch. Hyg., 1916, v. 85, p. 265, through J. Soc. Chem. Ind., 1917, v. 36, p. 733.

5. VEGETABLE DRUGS.

Husking, Charles L.: Observations on the changes in the sources of supply of crude drugs.—Oil, Paint & Drug Rep., 1917, v. 91, No. 7, p. 7.

Penick, S. B.: A discussion of the crude drugs of the U. S. P., IX, with respect to their standards, their market value, the difficulty of securing those of foreign origin, and the difficulty of securing those of domestic origin.—J. Am. Pharm. Assoc., 1917, v. 6, p. 695–699.

Zufall, C. J.: A criticism of the U. S. P., VIII, descriptions of certain vegetable drugs.—J. pharm. et chim., 1917, v. 16, p. 265–267; see also J. Am. Pharm. Assoc., 1915, v. 4, p. 530.

Anon.: It will be necessary for a botanist to have more than an ordinary training in this subject in order to understand some of the descriptions of the vegetable drugs given in the U. S. P., IX.—Meyer Bros. Drug., 1916, v. 37, p. 231.

Anon.: Prof. Moll, of Holland, is said to recommend that complete monographs be included in the Dutch pharmacopoeia for all vegetable drugs. His reasons for this recommendation, together with a sample monograph on capsicum, are given.—Chem. & Drug., 1917, v. 89, No. 1941, p. 92–93.

Congdon, Leon A.: Among the root drugs which are quite susceptible to the attack of worms or insects are the following: Licorice, ginger, pleurisy, gentian, orris, and serpentaria. The powdered drugs most commonly affected in the market are saffron, gentian, elm, rhubarb, belladonna, capsicum, anise, fenugreek, flaxseed, senna, and ginger. The seeds found to be frequently attacked by insects and worms are coriander, cumin, quince, stramonium, caraway, anise, dill, and hemp.—Proc. Kansas Pharm. Assoc. 1917, p. 89.

Beal, George D., and Okey, Ruth: Detailed descriptions of tests for the qualitative identification of the drugs containing emodin, such as senna, cascara, rumex, rhubarb, frangula, and aloes.—J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

Hubbard, W. S.: Descriptions of methods for the identification of emodin-bearing drugs.—J. Ind. & Eng. Chem. 1917, v. 9, p. 518–521.

Kraemer, Henry: An illustrated discussion of the practical value of pharmacognosy.—Proc. Minnesota Pharm. Assoc. 1917, p. 247–252.

W. C. de G.: A review of a 32-page pamphlet on the harvesting, storing, and methods of using a number of the more important medicinal plants growing in Germany. The work has been compiled by the "Kaiserlichen Gesunheitsamts" in conjunction with the "Arzneipflanzen-Ausschusz der Deutschen Pharmazeutischen Gesellschaft."—Chem. Weekblad, 1917, v. 14, p. 944–945.

André, G.: Data relative to the drying of vegetable substances at different temperatures are given.—Bull. soc. chim. France, 1917, v. 23, p. 430–437.

Alsberg, C. L.: The tentative standards of the Bureau of Chemistry for caraway seed, cumin seed, poppy seed, lavender flowers, and sage leaves are given.—S. R. A. Chem. 1917, No. 19, p. 51.

Viehoever, Arno: A discussion of the methods for the detection of mold in drugs, foods, and spices.—J. Am. Pharm. Assoc. 1917, v. 6, p. 518–524.

Tschirch: An abstract of an address on war botany delivered before the "Deutschen Pharmazeutischen Gesellschaft."—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 114–118.

Holm, Theo.: Medicinal plants of North America. A discussion of *Aralia* L. and *Panax* L.—Merck's Rep. 1916, v. 25, p. 11–15, 62–65, 126–130, 177–180.

De Mars, G. J.: Descriptions of some of the medicinal plants found growing in northern Minnesota are given.—Northwestern Druggist, 1916, v. 17, No. 11, p. 30–31.

Kozlov, M. N.: A preliminary report of the work at the chemical aboratory of the Sonkhoum experiment station, Caucasus, on the extraction of medicinal substances from local plants—viz, eucayptus, wild mint, camphor, castor oil, etc.—Chem. Abstr. 1917, v. 11, p. 3094.

Beille, L.: The medicinal-plant industry. Its development in France and its future in the southeast.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 356–389.

Anon.: An enumeration and description of some of the plant drugs entering into the folk remedies of the Caucasus.—Farm. Españ. 1917, v. 40, p. [illegible].

Anon.: A short note on the medicinal plants of Guatemala.—Pharm. Era, 1917, v. 50, p. 154.

Jones, D. T.: A report on the medicinal plants of South Dakota. About 47 wild plants are enumerated.—Proc. Missouri Pharm. Assoc. 1917, p. 31–38.

Remmoser, Josef: Notes on the possibilities of using medicinal plants indigenous to Germany as substitutes for those imported.—Ztschr. a. allgem. österr. Apoth.-Ver. 1917, v. 55, p. 372, 381–382, 393–394, 401–403, and 411–412.

Reutter: A table enumerating the drugs indigenous to Switzerland, their principal constituents, their use and their cost.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 374–376.

Swildens, J. J.: Notes on the medicinal plants of Greater Netherlands.—Pharm. Weekblad, 1917, v. 54, p. 70–77, 93–101, 141–147, 175–184, 231–236, 249–255, 273–277, 369–376, 453–457, 486–492, 541–547, 605–611, 629–633, 709–716, 754–760, 881–890, 975–982, 1020–1025, 1134–1144, 1308–1315, 1375–1379, 1420–1426, 1494–1503. See also A. J. Van Laren, p. 519–525, 661–667, 815–828, 953–960, 1144–1149, 1279–1287, 1437–1442.

Van Zijp, C.: Researches on the identification of different species of cinchona.—Pharm. Weekblad, 1917, v. 54, p. 328–335.

Holm, Theo.: An illustrated description of the structure of *Ambrosia artemisiaefolia* L. and *A. trifida* L.—Merck's Rep. 1917, v. 26, p. 120–122, 179–180.

Cuhel, Libussa, and Milada: A pharmacognostical study of Radix *morsus diaboli*.—Pharm. Post, 1917, v. 50, p. 353–354.

Holm, Theo.: A continuation of an article describing the structure of the vegetative organs of *Panax quinquefolium* and *P. trifolium*.—Merck's Rep. 1917, v. 26, p. 6–8.

Heintzleman, P. S.: It is estimated that approximately 14,000 pounds of ginseng were imported into Canton, China, from the United States during the year 1916.—Com. Rep. 1917, No. 71, p. 1145.

J. J. H.: A review of a small pamphlet by G. Arends entitled *Volkstümliche Anwendung der einheimischen Arzneipflanzen*.—Chem. Weekblad, 1917, v. 14, p. 580.

Anon.: A book review calls attention to bulletin No. 23 of the Lloyd Library entitled *Bibliography Relating to Botany Exclusive of Floras*. Volume 2.—Pharm. Era, 1917, v. 50, p. 92.

Anon.: A review of the volume, *Handbook of Pharmacognosy* by Otto A. Wall states that the author's plan is an admirable one in that it enables the student to get a comprehensive view of the whole field of pharmacognosy, particularly as it relates to the question of identification.—Pharm. Era, 1917, v. 50, p. 340.

Moser, John, Jr.: In a review of a volume by William Mansfield, entitled *Histology of Medicinal Plants*, it is stated that the book is evidently intended as an introductory course to the study of pharmacognosy, and that it should be welcomed because it shows an increasing interest in that subject. Am. J. Pharm. 1917, v. 89, p. 89–90.

Anon.: A book review of a volume by Henry Kraemer, entitled *Scientific and Applied Pharmacognosy*, states that the work should be a success, as it is one of the most complete and best of its kind at the present time.—J. pharm. et chim. 1917, v. 16, p. 386–387.

Anon.: A book review calls attention to a bulletin published by the University of Wisconsin entitled *Plant Chemistry for Pharmacy Students*. The bulletin is not claimed to be a text book or a laboratory manual, but merely a guide to instructors and students who are taking up the study of plant chemistry. -Pharm. Era, 1917, v. 50, p. 372.

Anon.: A review of Hygienic Laboratory Bulletin No. 105, *Digest of Comments on the Pharmacopoeia of the United States of America and on the National Formulary*, states that this vast bibliographic index should have a place in every library, where it may be consulted with profit by those who intend to undertake any work in pharmacognosy.—J. pharm. et chim. 1917, v. 15, p. 173.

Anon.: A book review of the twelfth edition of G. A. Buchheister's handbook of pharmaceutical practice states that three-fourths of the work is devoted to botany, pharmacognosy, and chemistry.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 301.

Fischelis, Robert P.: In a review of the sixth edition of *Culbreth's Materia Medica and Pharmacology* it is stated that the work has been thoroughly revised to conform to the U. S. P., IX, and that it also includes references to the important drugs and preparations of the N. F., IV.—Am. J. Pharm. 1917, v. 89, p. 324–325.

Anon.: A book review of a work by Lucius E. Sayre, entitled *Organic Materia Medica and Pharmacognosy*. The classification of plant drugs has been changed to conform to the system in use by modern authors. Bull. Pharm. 1917, v. 31, p. 305.

Anon.: A review of the ninth edition of a book by Reynold Webb Wilcox on Materia Medica and Therapeutics.—Bull. Pharm. 1917, v. 31, p. 393.

Anon.: A review of a volume by Thomas S. Blair, entitled *Botanic Drugs, Their Materia Medica, Pharmacology and Therapeutics*. D.-A. Apoth.-Ztg. 1917, v. 38, p. 87.

Anon.: A book review of the work entitled *The National Standard Dispensatory*, third edition.—Apothecary, 1917, v. 14, No. 4, p. 10.

1. CULTIVATION OF MEDICINAL PLANTS.

Anon.: The N. A. R. D. has adopted a resolution to the effect that the association go on record in favor of the establishment of a pharmaceutical experiment station in every State of the Union, and the support, at least in part, of such stations by the Federal Government for the benefit of pharmacy and in general the highly important vegetable materia medica in particular.—Apothecary, 1917, v. 29, No. 11, p. 33.

Miller, F. A.: A lecture on the cultivation of medicinal plants.—J. pharm. et chim. 1917, v. 16, p. 255–264.

Tschirch, A.: A discussion of leading viewpoints on the cultivation of medicinal plants.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 575–578.

Zörnig, Heinrich: General comments on the cultivation of medicinal plants.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 2–3, 25, 54–55.

Bolenbaugh, Albert: An account of the cultivation of digitalis, belladonna, cannabis, and other drugs in the vicinity of Richmond, Va.—Virginia Pharm. 1917, v. 1, p. 143–148.

Chevalier: Notes on the cultivation of mint, belladonna, stramonium, hyoscyamus, aconite, colchicum, etc. The manufacture of alkaloids by the pharmacist is advised.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 283–286.

Shenstone, J. C.: Herb growing in the British Empire, its past, present, and future.—J. Roy. Soc. Arts, 1917, v. 65, p. 445–454.

E. H. T.: Statistics relative to the cultivation of certain medicinal plants in England are presented.—J. Board Agric. 1917, v. 23, p. 1101–1104, through J. Soc. Chem. Ind. 1917, v. 36, p. 402.

Anon.: Historical notes on the cultivation of rhubarb in Great Britain.—J. Roy. Soc. Arts, 1917, v. 65, p. 596–598.

Goris, A.: Notes on the cultivation and harvesting of medicinal plants in France.—Bull. Sc. pharmacol. 1917, v. 24, p. 46–63.

Schmidt: A discussion of efforts to cultivate and harvest medicinal plants in Germany. An abstract.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 9–12.

Thoms, H.: Notes on the cultivation and harvesting of medicinal plants in Germany.—Umschau, 1917, v. 21, p. 265–266, through Ztschr. angew. Chem. 1917, v. 21, p. 257.

Senft, Em.: Notes on the cultivation of medicinal plants in Germany.—Pharm. Post, 1917, v. 50, p. 173–174 and 181–183.

Mattirolo, O.: An enumeration of some of the medicinal plants which may be cultivated in different parts of Italy.—Giorn. farm. chim. 1917, v. 66, p. 91–94.

Anon.: A book review calls attention to a bulletin of the University of Wisconsin, entitled *Report of the Director of the Pharmaceutical Experiment Station for the Fiscal Years July 1, 1915, to June 30, 1916.*—Pharm. Era, 1917, v. 50, p. 154.

D. H. W.: A review of a volume on the cultivation of medicinal plants by Th. Meyer, entitled *Arzneipflanzenkultur und Kräuterhandlung Rationelle Züchtung und Verwertung der in Deutschland zu zuchtenden Arznei und Gewurzpflanzen. Eine Anleitung fur Apotheker, Landwirte und Gärtner.*—Chem. Weekblad, 1917, v. 14, p. 298–299.

Anon.: A book review calls attention to a small volume by Ada B. Tweetgen, entitled *Profitable Herb Growing and Collecting.*—Pharm. J. 1917, v. 98, p. 7.

Anon.: A review of a pamphlet by Mrs. John D. Ellis, entitled *Herbs used in Medicines.* The work contains colored plates and drawings by Miss Ethel M. Barlow. It contains information of interest principally to those engaged in the growing of medicinal plants. –Chem. & Drug. 1917, v. 89, No. 1938, p. 46.

2. POWDERED DRUGS.

Dickman, George C.: The insertion of microscopical descriptions of powdered drugs in the U. S. P., IX, is a distinct step in advance, as by this means it becomes an easy matter for the pharmacist to detect adulterants. –Proc. New York Pharm. Assoc. 1917, p. 96.

Schneider, Albert: A key to the identification of powered vegetable drugs based upon microscopic structure. –Pacific Pharm. 1917, v. 10, p. 177–183.

Anon.: A description of a standard screen scale. A table of sieves now on the market which would most nearly meet the tolerances of the standard screen scale, as well as specifications for sieves of the standard scale, is appended. –Chem. Abstr. 1917, v. 11, p. 2288.

Anon.: A book review calls attention to a volume by Wm. Chase Stevens entitled *Plant Anatomy, from the Standpoint of the Development and Functions of the Tissues, a Handbook of Micro-Technique.*—Merck's Rep. 1916, v. 25, p. 132.

3. MOISTURE DETERMINATIONS.

Berger: A discussion of some of the newer methods for the determination of moisture in spices. –Schweiz. Apoth.-Ztg. 1916, v. 54, p. 189–190.

Sindall, Harry E.: Referee report on spices. The report contains a description of a method for the determination of moisture, and a table showing the results obtained by the use of the method.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 197.

Besson, A. A.: An illustrated description of an apparatus for the determination of moisture by distillation.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 69–71.

Ledediantzev, A., and Zalyguine, G.: An experimental study of the determination of water in vegetable substances.—Chem. Abstr. 1917, v. 11, p. 458–459.

1. ASH DETERMINATIONS.

Penick, S. B.: A most valuable addition to the U. S. P. has been the statement of ash limits for each item. Information of interest is very rapidly available by this test and with much less likelihood of wide variation in the hands of different persons. It means for cleaner crude drugs and in a way regulates the character of the foreign matter permissible under present requirements.—J. Am. Pharm. Assoc. 1917, v. 6, p. 695.

Sindall, Harry E.: Referee report on spices. Data obtained in the determination of total ash by different methods and investigators are presented.—J. Assoc. Off. Agric. Chem. 1917, v. 3, p. 108-109.

Bruner, Clement S.: A preliminary report on the determination of ash, especially in spices. Data obtained by different investigators are presented.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 201-208.

[illegible], A. W.: Data showing the ash content of commercial samples of spices and condiments purchased in groceries and drug stores of Kansas City, Mo.—Proc. Missouri Pharm. Assoc. 1917, p. 76-79.

Blumenthal, P. L., et al.: A report of investigations dealing with the method of ashing organic materials for the determination of potassium.—J. Ind. & Eng. Chem. 1917, v. 9, p. 753-756.

2. GLUCOSIDES.

Bau, Arminius: A note supporting the views of Auld, Caldwell and Courtauld on the constitution of amygdalin.—Biochem. Ztschr. 1917, v. 80, p. 159-162, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 407.

Bau, A.: Experiments on the decomposition of amygdalin by Saccharomyces ludwigii to gain an insight into the nature of the sugar component of amygdalin.—Biochem. Ztschr., 1917, v. 80, p. 159-162, through J. Soc. Chem. Ind. 1917, v. 36, p. 867.

Bourquelot, Aubry, Charaux, and others: Experimental observations on the hydrolysis, synthesis, and constitution of glucosides.—J. pharm. et chim. 1917, v. 15, p. 329 and 335; Compt. rend. acad. sc. 1917, v. 164, p. 758-760, 831-833; J. pharm. et chim. 1917, v. 16, p. 77-81; Ann. chim. Paris, 1917, v. 7, p. 153-220. See also Fischer et al., Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 711-722, 1047-1069.

Anon.: A book review calls attention to a volume by R. Kobert on the methods for the identification of the saponins.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 200.

3. ALKALOIDS.

Dohme, A. R. L.: Assay processes for alkaloids and their salts seem desirable, as the amount of water contained in them varies considerably.—Proc. N. W. D. A. 1917, p. 503.

Ehrlich, Felix: A study of the vegetation of yeasts and molds on heterocyclic nitrogen compounds and alkaloids. J. Chem. Soc. 1917, v. 112, No. 1, p. 309.

Launoy, L.: The sensitiveness of the general method of extraction of alkaloids in water. The method employed namely, to make the water alkaline with sodium carbonate and subsequently to extract it three times with chloroform- is capable of detecting 1 part of alkaloid in 2,000,000 parts of water. Compt. rend. acad. sc. 1917, v. 165, p. 360–362.

Haller, R.: Notes on the fluorescence exhibited by certain alkaloidal solutions and the application of this phenomenon to the detection of alkaloids in toxicological work. –Ztschr. Physikal. Chem. u. Biol. 1916, v. 2, p. 397, through Zentralb. Biochem u. Biophys. 1917, v. 19, p. 46.

Eder, R.: The methods employed in the detection of atropine and related mydriatic alkaloids are carefully reviewed, and two new reagents for the detection and differentiation of the more important of these bases are described.—Schweiz. Apoth.-Ztg. 1916, v. 51, p. 501–504, 517–520, 534–537, 544–548, 560–563, 609–612, 621–624, 657–661, 669–670, 685–687, and 717–719; J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 346.

Anon.: A very sensitive reagent for the solanaceous alkaloids consists of a solution of para-dimethyl-amido-benzaldehyde in concentrated sulphuric acid to which a little water is added. With a trace of any of the solanaceous alkaloids, the reagent gives a reddish-violet color on warming.—Pharmazevtizeski J. 1916, p. 263, through Répert. pharm. 1917, v. 28, part 2, p. 81.

Tunmann, O.: Notes on the use of iodo-zinc chloride for the identification of the solanaceous alkaloids, morphine, codeine, papaverine, and sparteine. Microchemical reactions of sparteine with a number of other reagents are also described. Schweiz. Apoth.-Ztg. 1917, v. 55, p. 348.

Radford, Norah, and Brewer, G.: A description of a modification of Kunze's method for the quantitative determination of theobromine. The nitrogen in the silver precipitate is determined and the theobromine present calculated on this basis.—Analyst, 1917, v. 42, p. 274–276.

Robinson, Robert: A theory of the mechanism of the phytochemical synthesis of certain alkaloids—i. e., those of the pyrrolidine, piperidine, quinuclidine, and the iso-quinoline groups.– J. Chem. Soc. Lond. 1917, v. 111, p. 876–899.

Sanchez, J. A.: Tests for the identification of novovaine. A red coloration is obtained when a 0.2 per cent solution of novocaine is heated with 2 drops of 10 per cent sodium nitrite solution and 3 drops of sulphuric acid, and then diluted with water and treated with

Mulder's reagent. The ethylic nucleus is identified by the formation of iodoform, and the aldehydic nucleus by distilling the substance with dilute sulphuric acid and manganese dioxide and testing the filtrate with magenta-sulphurous acid reagent. With bromine, narceine yields a yellow precipitate which dissolves when the mixture is heated.--Rev. Farm. 1917, v. 60, p. 699.

Vanderkleed, Charles E., and Ewe, George E. In solutions of alkaloids, cresol, in the proportion of 0.5 per cent, acts like an alkali and liberates alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 279-284.

Rây, P. C. A description of molecular compounds of mercuric nitrite with the following alkaloids: Nicotine, conine, quinine, quinidine, cinchonidine, codeine, narcotine, strychnine, brucine, and cocaine.—J. Chem. Soc. 1917, v. 111, p. 507-510.

Heiduschka, A., and Sieger, H. A study of the chemistry of solanine with a view to determining its constitution.—Arch. Pharm. 1917, v. 255, p. 18-44, through J. Soc. Chem. Ind. 1917, v. 36, p. 982.

Gadamer, J., and Klee, Walter. A report of investigations to determine the constitution and properties of the alkaloids of corydalis.—Arch. Pharm. 1916, v. 254, p. 295-305, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 472.

Filippi, Edoardo. From a pharmacological comparison the author concludes that yohimbine and quebrachine are not identical, although they are similar in many respects.—Arch. farmacol. sper. 1917, v. 23, p. 107-128 and 129-140.

Bodnár, H. Data showing the nicotine content of Austrian smoking tobacco and its relation to the strength of the tobacco.—Chem. Zentralbl. 1916, II. 275, through Chem. Abstr. 1917, v. 11, p. 1881.

Asahina, Y., and Mayeda, S. Researches on the structure of cytisine and matrine.—J. Pharm. Soc. Japan, 1917, No. 419, p. 1.

Anon. An abstract of a paper by James M. Petrie on the quantities of hydrocyanic acid in Heterodendron oleaefolium, a common evergreen shrub of Australia.—Chem. & Drug. Australas. 1917, v. 32, p. 472.

C. MISCELLANEOUS PLANT CONSTITUENTS

Power, F. B. A general address dealing with the aims and development of phytochemical research.—Am. J. Pharm. 1917, v. 89, p. 97-110.

Bocquillon, H. A report of a continuation of work on the active principles of plants of the genus Xanthoxylon.—Répert. pharm. 1917, v. 28, p. 66.

Brill, Harvey C., and Wells, Albert H. A study of the pharmacologically active constituents of certain Philippine medicinal plants.—The plants studied were: *Lophopetalum toxicum*, *Erythrophlaeum densiflorum*, *Quisqualis indica*, *Tylophora brevipes*, *Toddalia asiatica*, *Lemasia amara*, *Rourea erecta*, and *Hymenodictyon excelsum*.—Philippine J. Sc. 1917, v. 12, sec. A, p. 167–195.

Heyl, Frederick W.: An analysis of ragweed pollen showed the following composition: Moisture, 5.3 per cent; alcohol-soluble matter, 42.9 per cent; crude fiber, 12.2 per cent; pentosans, 7.3 per cent; ash, 5.4 per cent; dextrin, 2.1 per cent; protein, 24.4 per cent. –J. Am. Chem. Soc. 1917, v. 39, p. 1470–1476.

Hesse O. A contribution to our knowledge of the lichens and their characteristic constituents.—J. prakt. Chim. 1916, v. 94, p. 227–270, through J. Soc. Chem. Ind. 1917, v. 36, p. 566.

Kraemer, Henry: A review of a book by Paul Haas and T. G. Hill entitled *An Introduction to the Chemistry of Plant Products*. –Science, 1917, v. 47, p. 15–16.

Mougne: A presentation of experimental data showing the distribution of β-galactosidase in the vegetable kingdom.—J. pharm. et chim. 1917, v. 15, p. 339–345.

Halberkann, J.: Researches on the properties of pseudocubebin obtained from the bark of *Ocotea usambarensis* Engl.—Arch. Pharm. 1916, v. 254, p. 246–255, through Chem. Abstr. 1917, v. 11, p. 1720.

Clarke, George, and Schryver, S. B.: A method for the preparation of plant nucleic acids is described in detail.—Biochem. J. 1917, v. 11, p. 283–291.

Caldwell, J. S.: A description of a new method for the isolation of pectin.—Physiol. Abstr. 1917, v. 2, p. 698.

Ehrlich, F.: A paper dealing with the chemical constitution and technical importance of pectins. –Chem. Ztg. 1917, v. 41, p. 197–200 through J. Soc. Chem. Ind. 1917, v. 36, p. 562.

Trier, C.: A summary of Ehrlich's work on the pectin compounds.—Schweiz. Apoth.—Ztg. 1917, v. 55, p. 369–374.

van der Haar, A. W.: The author gives a summary of his investigations on the chemistry of *Polyscia*, the crystalline α—hederin of ivy, saponaria and aralea saponins, senegin, and digitonin. –Biochem. Ztschr. 1916, v. 76, p. 335–349 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 41.

van der Haar, A. W.: A report of experiments showing the variations in different preparations of saponin with respect to their toxicity to fish and frogs, and also with respect to hemolytic action. -Biochem. Ztschr. 1916, v. 76, p. 350–358, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 70.

Chernoff, L. H., Viehoever, Arno, and Johns, Carl O.: A report of researches to determine the composition and properties of the saponin obtained from *Yucca filamentosa*.—J. Biol. Chem. 1917, v. 28, p. 437–443.

D. H. W.: A review of a volume on saponins by R. Kobert entitled *Neue Beiträge zur Kenntnis der Saponinsubstanzen, für Naturforscher, Aerzte, Apotheker, Medizinalbeamte, usw.*—Chem. Weekblad, 1917, v. 14, p. 730-731.

[illegible], H. E.: Scientific notes on the official drugs containing anthraquinone derivatives.—Am. Pharm. Chem. 1917, v. 23, p. 25-28.

Heiduschka, A., and Panzer, A.: A report of researches to determine the constitution of bixin. The results obtained point to the the formula $C_{25}H_{30}O_4$.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 546-554, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 588.

Herzig, J., and Faltis, F.: By observing the proper precautions with respect to the carrying out of the combustion in the determination of the molecular weight of bixin, the authors claim that results agreeing with the empirical formula $C_{25}H_{30}O_4$ are always obtained.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 927-929, through J. Chem. Soc. Lond. v. 112, part 1, p. 577.

Rinkes, I. J., and van Hasselt, J. F. B.: A fourth contribution to the chemistry of bixin, a constituent of annatto.—Chem. Weekblad. 1917, v. 14, p. 888-894.

Ishikawa, T.: Tuba, an [illegible] poison for fish, contains tubatoxin ($C_{19}H_{18}O_6$). The lethal dose (intravenous) for a rabbit is 0.0000 gram per kilo.—Chem. Abstr. 1917, v. 11, p. 2371 from Tokyo Igakkwai Zasshi, 1916, v. 30, p. 45-46.

McNair, J. B.: On the oxidase present in *Rhus diversiloba*.—J. Infect. Dis. 1917, v. 20, p. 485; J. Am. M. Assoc. 1917, v. 68, p. 1664.

Oathout, L. J.: A short article on the composition and properties of the oleoresin and oil of *Pinus jeffreyi*.—J. Am. Pharm. Assoc. 1917, v. 6, p. 137-139.

Willstätter, R., Léger, E., and others: Reports of investigations to determine the constitution of the anthocyanin pigments of plants.—J. Chem. Soc. 1917, v. 112 and J. pharm. et chim. 1917, v. 15.

Watt, Henry E.: A note on the melting point of allantoin obtained from comfrey root and that prepared synthetically.—Pharm. J. 1917, v. 99, p. 283.

Okuda, Y., and Eto, T.: A report of an investigation to determine the form of iodine in marine algae.—J. Coll. Agric. Imp. Univ. Tokyo, 1916, v. 5, p. 341-353, through Physiol. Abstr. 1917, v. 2, p. 195.

Gautier and Clausmann: Data relative to the occurrence of fluorine in the vegetable kingdom are presented. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 97-100.

Sakai, S.: Researches on the constituents of *Cnidium officinale* Makino.—"The chief ingredient of the extract of this drug is a volatile oil of [illegible] which is present to the extent of about 0.87 per cent." The chief action of the oil is to stimulate the vasomostrictors and raise the blood pressure. It stimulates the central nervous system, and increases the reflexes by reason of spinal irritation. It apparently has no action on the kidneys. In large doses the acid is able to produce hemolysis.—Tokyo Igaku Kai Zasshi, 1916, v. 30, p. 358 through Chem. Abstr. 1917, v. 11, p. 2386.

Emmanuel, Em. J.: A report of a chemical investigation of the root of *Rumex pulcher* L.—Ztschr. Apoth. Ztg. 1917, v. 55, p. 589–592, 601–604, 618–621 and 626–628.

Watson, G. B., and Sayre, L. E.: A report of the results obtained in the analysis of the seeds of the Kentucky coffee tree (*Gymnocladus canadensis*).—J. Am. Pharm. Assoc. 1917, v. 6, p. 601.

Issoglio, G.: A report of chemical researches on *Elaphomyces hirtus*. The plant was found to contain stearin, traces of alkaloids, mannite, inulin, and para-isodextrane. -Gazz. chim. ital. 1917, v. 47, p. 31.

Kobert, R.: Notes on the poisonous constituents of crocus and tulip roots.—Chem. Ztg. 1917, p. 63, through Pharm. Weekblad, 1917, v. 54, p. 993.

Mirande, Marcel: A report on *Isopyrum fumarioides* L., a new plant yielding hydrocyanic acid. -Compt. rend. acad. sc. 1917, v. 165, p. 717–718.

8. ASSAY PROCESSES.

Snyder, J. P.: To one who has found it necessary to perform analytical work under the U. S. P., VIII, and the U. S. P., IX, it is apparent that there is a decided improvement in the chemical assays of the latter, and although there is no doubt room for still further improvement, there are but few chemical methods which will not admit of some change when closely scrutinized. -J. Am. Pharm. Assoc. 1917, v. 6, p. 712.

Fuller, H. C.: The directions in the U. S. P. for conducting the proximate assays are too loosely worded. They place too much responsibility on the worker, who, unfortunately, is often too inexperienced to assume this responsibility. The personal equation of the drug analyst, even of wide reputation, is, to quote Kipling, "beyond the wit of any man, black or white, to fathom." -J. Am. Pharm. Assoc. 1917, v. 6, p. 70.

Kilmer, Fred B.: The American Drug Manufacturers' Association at its stated meeting held in February, 1917, caused to be established what is called a committee on standards and deterioration. The duties of the committee will be to promulgate suggestions for the improvement of assay methods and standards for the firms represented. -Proc. New Jersey Pharm. Assoc. 1917, p. 86–87.

Klein, Friedrich: In order to eliminate the danger of formation of troublesome emulsions in carrying out some of the alkaloidal assays of the U. S. P., the use of ethyl acetate and ether in place of chloroform is recommended.—D. A. Apoth. Ztg. 1917, v. 38, p. 52.

Anon. Under laboratory notes from the H. K. Mulford Co. it is stated that, owing to the tenacity with which alkaloidal residues obtained by extraction with chloroform retain the latter, such residues should be treated with ether before attempting to dry them to constant weight.—Drug. Circ. 1917, v. 61, p. 25.

Fuller, H. C. The author concludes from experience that the Aliquot assay of the U. S. P. IX, does not give as true an idea of the alkaloidal value of a drug as is given by the total extraction procedure of the U. S. P. VIII.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

Asher, Philip. An enumeration of the assay processes which are not included in the present Pharmacopoeia, but for which there is a great need.—Am. J. Pharm. 1917, v. 89, p. 174–175.

Dohme, A. R. L. The committee on standards and deterioration of the American Drug Manufacturers' Association states that a cantharis assay is desirable, as much spurious drug is on the market.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

[illegible]. A general discussion of the evaluation of medicinal extracts, followed by specific directions for the assay of a number of the more commonly used preparations of this class.—Boll. chim.-farm. 1917, v. 56, p. 477–481, 497–500, and 517–521.

Dutoit, P., and Meyer-Lévy. The determination of alkaloids by physico-chemical volumetric analysis is described. The method of measuring the end point of a reaction by observing the change in electrical conductivity is applied.—J. chim. phys. 1916, v. 14, p. 353–360; J. Soc. Chem. Ind. 1917, v. 36, p. 471.

Pinnow, J. A report of experiments on the systematic extraction of substances from aqueous solutions with ether.—Ztschr. Nahr.-Genussm. 1916, v. 32, p. 257–268, through Chem. Abstr. 1917, v. 11, p. 127.

Rasmussen, H. B. A method for the exact estimation of atropine is described. The formation of an insoluble salt by the addition of a slight excess of silicotungstic acid to an acid solution of atropine or its isomerides is made the basis of the test.—Ber. deutsch. pharm. Gesellsch. 1916, v. 26, p. 194–201, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 44.

[illegible], F. Data obtained in the examination of anthraquinone-containing drugs by the use of the Tschirch & Van [illegible] colorimetric method.—Apoth. Ztg. 1917, p. 95, through Pharm. Weekblad, 1917, v. 54, p. 1238.

Debourdeaux, Lucien. Modifications of Maupy's method for the estimation of theobromine in cacao are described.—J. pharm. et chim. 1917, v. 16, p. 309–311.

Radford, Norah, and Brewer, G.: A description of a method for the quantitative determination of theobromine. The theobromine is precipitated as a silver compound, and the quantity of nitrogen in the latter is estimated.—Analyst, 1917, v. 42, p. 274–276.

Thomsen, Th. S.: A comparison of the methods of Kissling and Ulex for the estimation of nicotine in tobacco extract.—Chem.-Ztg. 1917, v. 41, p. 476, through J. Chem. Soc. Lond., 1917, v. 112, part 2, p. 431.

Tingle, A., and Ferguson, A. A.: A description of a new method for the determination of nicotine in tobacco.—Trans. Roy. Soc. Canada, 1916, v. 10, p. 27, through J. Chem. Soc. 1917, v. 112, p. 55.

Sabatini, Angel: A description of a volumetric method for detecting *Ilex paraguayensis,* either pure or mixed with other species of *Ilex* or plants containing no caffeine.—Anales soc. quim. Argentina, 1917, v. 5, p. 192–200.

Roberts, J. G.: Presents the following comparison of assays of crude drugs for the years 1909 to 1917, inclusive:

Year.	Total.	Above.	Below.	Per cent above.
Report of –				
1909	395	313	82	79.3
1910	340	291	49	85.6
1911	263	224	39	85.1
1912	298	235	63	78.8
1913	382	264	118	69.1
1914	286	221	65	77.2
1915	133	98	35	73.6
1916	214	156	58	72.9
1917	172	147	25	85.3

Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

9. PHYSIOLOGICAL STANDARDIZATION.

Snyder, J. P.: The admission into the U. S. P., IX, for the first time of biological assays is undoubtedly a step in the right direction and, while these assays are, no doubt, far from perfect and will be subject to severe criticism, eventually much good must come from that criticism and we will obtain much better methods for physiological assays.—J. Am. Pharm. Assoc. 1917, v. 6, p. 714

Hamilton, Herbert C.: A general discussion of the biological standardization methods of the U. S. P. -Am. J. Pharm. 1917, v. 89, p. 61–70.

Dohme, A. R. L.: Practically all of the new physiological processes in the U. S. P. are not satisfactory and require revision, notably that for cannabis and digitalis.—Proc. N. W. D. A. 1917, p. 503.

Pittenger, Paul S.: A comprehensive discussion of the biological assay methods of the U. S. P., IX.—J. Am. Pharm. Assoc. 1917, v. 6, p. 865–872.

van Leeuwen, W. Storm: A discussion of the comparative values of biological and chemical methods for the assay of drugs and medicines. The section on biological assays in the U. S. P., IX. is also discussed.—Pharm. Weekblad, 1918, v. 54, p. 391–412.

van Leeuwen, W. Storm: Data obtained in the physiological evaluation of adrenalin, [illegible], and [illegible] by the blood-pressure method are presented.—Pharm. Weekblad, 1917, v. 54, p. 1129–1134.

van Leeuwen, W. Storm: A method for the physiological evaluation of narcotics based on the paralyzing effect of these substances on the central nervous system is described.—Pharm. Weekblad, 1917, v. 54, p. 1470–1478.

Eckler, C. R.: Illustrated descriptions of apparatus for studying the effect of drugs on the isolated guinea-pig uterus.—Lilly Sci. Bull. 1917, No. 8, p. 285–292.

6. PHARMACEUTICAL PREPARATIONS.

Lascoff, J. Leon: First and foremost, it is the duty of the pharmacist to see that his preparations are not only elegant in appearance but also active in their ingredients. A real working knowledge of the appearance and properties of the essential drugs is a *sine qua non* for the man who sets out to manufacture his own preparations according to the U. S. P.—J. Am. Pharm. Assoc. 1917, v. 6, p. 473.

Asher, Philip: Chemical facts in the preparation of some U. S. P. and N. F. galenicals.—Southern Pharm. J. 1917, v. 10, p. 80–82, 128–130, 188–190.

Editorial. Of the 427 liquid and solid preparations of the U. S. P., 206 contain alcohol. With respect to the N. F., 274 out of 575 preparations contain alcohol.—Bull. Pharm. 1917, v. 31, p. 5–6.

Cowie, W. B.: Notes on the risks incurred in using commercial glucose in pharmaceutical preparations.—Pharm. J. 1917, v. 98, p. 215–216.

[illegible], B.: The number of firms exhibiting pharmaceuticals at the last international exposition held at Lyon was 33. At the first of these fairs, held at the beginning of the war, only nine firms exhibited pharmaceutical products. The exhibits included such preparations as arsenobenzol, novarsenobenzol, allocaine, etc.—Lyon Médical, 1917, v. 126, p. 182; J. Am. M. Assoc. 1917, v. 68, p. 1786.

Delépine, Marcel: A general discussion of the preparations of benzoate of mercury in which the mercury salt is rendered water soluble by the addition of sodium chloride.—Bull. sc. pharmacol. 1917, v. 24, p. [illegible].

Llewellyn, J. F.: A short article on the medicines used by the ancient Syrians.—Drug. Circ. 1917, v. 61, p. 117–118.

Kraemer, Henry: In a review of the third edition of *The National Standard Dispensatory* it is stated that, although the authors announce that the work has been thoroughly revised and is up to date, this is far from the truth. The addition of the complete pure food and drugs act and regulations, as well as the Harrison narcotic law, is stated to be the most prominent feature of the new work,—Am. J. Pharm. 1917, v. 89, p. 90–91.

Fischelis, Robert P.: In a book review of the second edition of Arny's *Principles of Pharmacy,* it is stated that perhaps the greatest distinctive feature of the work is the excellent and extensive bibliography given at the end of each chapter.—Am. J. Pharm. 1917, v. 89, p. 322–323.

Beringer, George M.: A review of the fifth enlarged and revised edition to a work by Charles Caspari, jr. entitled *A treatise on Pharmacy for Students and Pharmacists.*—Am. J. Pharm. 1917, v. 89, p. 42–45.

Anon.: A book review calls attention to a volume on practical pharmacy by Edwardo Esteve and F. Cavallero, entitled *Tratado de Farmacia practica.*—Farm. Españ. 1917, v. 49, p. 182–184.

1. GENERAL FORMULAS.

Beringer, George M.: One one of the most noteworthy advances in the revision of the Pharmacopœia has been the adoption of type processes under fluid extracts and tinctures, thus saving a number of pages in the book and avoiding the unnecessary repetition of instructions.—Am. J. Pharm. 1917, v. 89, p. 15.

Brown, L. A.: The adoption of typical formulas for galenical preparations has resulted in much saving of space, obviating much needless repetition of directions. Four type processes are given for fluid extracts, two for tinctures, and one for medicated waters.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 2.

2. STANDARDIZATION.

Penick, S. B.: The standards that our new Pharmacopœia has provided for botanical drugs speaking generally, are unquestionably wise and not unreasonable. Those drugs for which our chemists have been unable to establish chemical methods for determination of quality are provided for by other standards which will safeguard the public against anything that is not true to name and of the best quality.—J. Am. Pharm. Assoc. 1917, v. 6, p. 695.

Rusby, H. H.: A discussion of the importance of establishing practical standards for drugs amd medicines.—Proc. Am. Drug Mfg. Assoc. 1917, p. 8–11.

Anon.: A resolution to the effect that the clause in H. R. 4960, which empowers the United States Public Health Service to determine the potency and toxicity of products used for the prevention of diseases of man, manufactured by a citizen of the United States under any patent owned by the enemy or ally of the enemy, when licensed by the Federal Trade Commission, be stricken out, because the power of fixing standards for medicinal products should not be delegated by Congress to any branch of the Federal Government.—Proc. Wisconsin Pharm. Assoc. 1917, p. 101.

Anon. At the meeting of the National Drug Trade Conference at Washington, January 16, the establishment of arbitrary standards for foods and drugs beyond those already made was opposed.—Am. Perf. 1917, v. 11, p. 351.

Editorial. In a discussion of the subject of drug standardization, it is stated that no bureaucracy can be trusted with such important work—particularly the Bureau of Chemistry, which has not seen fit to deny its laxity in the examination of drugs entering at the port of New York.—Oil, Paint & Drug Rep. 1917, v. 91, No. 2, p. 15.

3. GALENICALS

Beringer, George M. Reasons for some of the changes in the formulas of galenicals made in the ninth revision of the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 248-251; Western Drug. 1917, v. 29, p. 220-221.

Lascoff, J. Leon. An enumeration of some of the changes which have been made in the galenicals of the U. S. P., IX.—Pract. Drug. 1917, v. 35, No. 5, p. 24-26.

Beringer, George M. Notes on some of the newer galenical preparations of the N. F., IV.—Proc. New Jersey Pharm. Assoc. 1917, p. 91-92.

Hratuschka, A., and Schmitt, J. A study of the behavior of certain galenicals, tinctures, and extracts, toward Fehling's solution for the purpose of determining their value.—Apoth.-Ztg. 1916, v. 31, p. 399, through Chem. Abstr., 1917, v. 11, p. 1719.

Wastenson, H. A description of a method for the determination of mercury in galenical preparations. The method is stated to be superior to that of either Swedish or German pharmacopoeia.—Svensk farm. Tidskr. 1917, v. 21, p. 54-59.

Kunz-Krause, H. Descriptions of methods for the recognition of minute quantities of pyridine in galenical preparations.—Apoth.-Ztg. 1916, v. 31, p. 401-404, through Chem. Abstr. 1917, v. 11, p. 1721.

Hanson, C. J., and Marion, J. W. A method for the determination of alcohol in galenicals is based on the fact that C_2H_5OH may be separated from aqueous solution by saturating the latter with KF.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1126-1127.

Mossman, George C. Notes on various methods for determining the alcoholic content of medicinal preparations.—Bull. Pharm. 1917, v. 31, p. 26-28.

DETERIORATION.

Congdon, Leon A.: Notes on the deterioration of various elixirs.—Proc. Kansas Pharm. Assoc. 1917, p. 89.

Congdon, Leon A.: In a report on the inspection of drug stores in Kansas, the tinctures and fluid extracts most commonly found in a deteriorated condition are enumerated. Data are also given showing the properties of some deteriorated fluid extracts.—Proc. Kansas Pharm. Assoc. 1917, p. 85–92.

Buhrer, C.: A discussion of precipitation phenomena in fluid extracts and of the causes producing the same.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 4–7.

Romanelli, R.: Camphor is recommended as a preservative of aqueous solutions prone to deteriorate on keeping. -Drug. Circ. 1917, v. 61, p. 232; Chem. Abstr. 1917, v. 11, p. 1722; J. Am. M. Assoc. 1917, v. 68, p. 1011.

Fleming, Fred: Facts concerning the deterioration of certain biological products.—Pacific Pharm. 1917, v. 11, p. 84–87.

François, Maurice: A report of researches conducted for the purpose of determining the rate of decomposition of mercuric lactate and aqueous solutions of the same.—J. pharm. et chim. 1917, v. 15, p. 33–41.

4. INCOMPATIBILITY.

Berger: A review of some of the more important work in incompatibilities. -Schweiz. Apoth.-Ztg. 1916, v. 54, p. 145–148.

Anon.: A discussion of the behavior of a large number of the official drugs when combined with other substances.—N. A. R. D. J. 1917, v. 23, p. 815–816, 896–897, 1036, 1160–1161, v. 24, p. 107–108, 154–155, 502, 542, 578–579, 675–676, 784–785, 831, 937, 971, v. 25, p. 105–106, 236–237, 408–409, 529–530.

Astruc, A., and Cambe, J.: Observations on the incompatibilities of certain phenolic compounds, thymol, phenol, β-naphthol, resorcinol, guaiacol, pyrogallol, etc.—J. pharm. et chim. 1917, v. 15, p. 383–386; Farm. Españ. 1917, v. 49, p. 568–469, 580–581.

Astruc, F., and Cambe, J.: On the incompatibility of sodium bicarbonate with certain salicylates, especially bismuth salicylate. – Farm. Españ. 1917, v. 49, p. 88–89; see also E. Canals, p. 231–232.

Hegnel: Some observations on incompatible mixtures, with special reference to sodium bicarbonate in irrational prescriptions.—Boll. chim.-farm. 1917, v. 56, p. 280.

Anon.: A note calls attention to the incompatibility of bismuth subnitrate with sodium hypophosphite if dispensed in powder papers which do not exclude moisture.—Rev. Farm. 1917, v. 60, p. 438.

Elliot, George: A note calling attention to an incompatible tar ointment. The ointment in question contained yellow oxide of mercury and zinc oxide in addition to tar.—Pharm. J. 1917, v. 99, p. [illegible].

Mannich, C.: Notes on the incompatibility of antipyrine with hexamethylenamine-tetramine or formaldehyde preparations in the presence of acids.—Boll. chim. farm. 1917, v. 56, p. [illegible].

Ueck, P. Henry: Whenever hydrogen peroxide is combined with solutions containing menthol, vanillin, cinnamic aldehyde, oil of lemon, oil of peppermint, or volatile oil of almonds, the flavor of the solution is entirely destroyed within a short time.—Drug. Circ. 1917, v. 61, p. 398.

Anon.: A book review of a volume by Edsel A. Ruddiman, entitled *Incompatibilities in Prescriptions*, refers to the volume as the most complete text known on the subject of incompatibilities.—Midl. Drug. 1917, v. 51, p. 258.

5. EXTRACTION.

Beringer, George M.: For the first time the U. S. P. IX directs that fractional or divided percolation be employed in the preparation of certain fluid extracts—namely, the fluid extracts of [illegible], aromatic powder, and bitter orange peel.—Am. J. Pharm. 1917, v. 89, p. 18.

Buhrer, C.: Some comments on the percolation of fluid extracts.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 4–7.

Palme, H., and [illegible], G.: Data showing the effect of the adsorption phenomena on the extraction of alkaloids from drugs.—Svensk farm. Tidskr. 1917, v. 21, p. 21–[illegible] and 37–41.

6. STERILIZATION.

Gay, Mrs. St. Claire Ransford: Among the commendable additions to the U. S. P. are the instructions on sterilization. These are concise enough to form a part of the every-day routine of even the department drug store, but no doubt, simple as they are, they will be discarded by many, except upon the visit of the inspector.—J. Am. Pharm. Assoc. 1917, v. 6, p. 607.

Dunn, J. Allen: Notes on the sterilization of pharmaceutical products.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 136–138.

Lascoff, J. Leon: A discussion of methods for the preparation and dispensing of sterilized solutions.—Pract. Drug. 1917, v. 35, No. 8, p. 27–28.

Davis, C. T.: British patent No. [illegible]. A process for the sterilization and storing of surgical ligatures consists of placing the ligatures or sutures in a liquid of such a nature that it will serve both for sterilizing during the process of heating and also for the subsequent preservation.—Chem. Abstr. 1917, v. 11, p. 1015.

[illegible], H., and [illegible] Lloyd C.: A description of a practical method for the sterilization of glasses at the soda fountain.—Virginia Pharm. 1917, v. 1, p. 181–183.

Goris, A.: A comprehensive discourse on the preparation and sterilization of catgut for sutures.—Bull. Sc. pharmacol. 1917, v. 24, p. 79–81, 141–154.

Anon.: A book review of a volume by A. Sartory, entitled *A Practical Guide to Bacteriological Manipulations for the Use of Pharmacists.* -Pharm. Weekblad 1917, v. 54, p. 105.

7. FORMS OF ADMINISTRATION.

Fette, George T.: A discussion of the applications of the laws of physical chemistry in electrolytic (ionic) medication.—Dental Cosmos, 1917, v. 59, p. 264–271.

Kesteven, Leighton: Some notes on ionic medication and the method of administration. -Brit. M. J. 1917, v. 2, p. 423-424.

Koller, H.: Therapeutic iontophoresis. Descriptions of extensive experiments made with the ions of heavy metals by passing them through dead animal membranes and through rabbit's ears. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 1878.

Sturridge, Ernest: A discussion of ionic medication, with special reference to the zinc ion.—Dental Cosmos, 1917, v. 59, p. 793–795.

Haldane, J. S.: A description of a convenient apparatus for the therapeutic administration of oxygen.—Brit. M. J. 1917, v. 1, p. 181–183.

Kobert, R., and Triller, L.: Biological investigations have shown that three groups of substances (astringents) are responsible for the therapeutic action of mud baths soluble aluminum salts, soluble ferric salts, and free humus acids.—Chem. Zentralbl. 1916, II, 338–339 through Chem. Abstr. 1917, v. 11, p. 1723.

Jacquot: Methods for the preparation of concentrated solutions of benzoate of mercury and calomel in oil are described. -Bull. Sc. pharmacol. 1917, v. 24, p. 83–85.

Anon.: A book review calls attention to a small volume by Bernard Fantus entitled *Candy Medication*—Pharm. Era, 1917, v. 50, p. 340.

AMPOULES.

Rogers, R. R.: A detailed discussion of ampoule medication, including descriptions of methods for the filling of ampoules, their sterilization, and manner of use.—Proc. California Pharm. Assoc. 1917, p. 54–58.

Paul, Theodor: A discussion of the changes suffered by liquid medicaments in glass, together with the causes and phenomena productive thereof and incidental thereto. In order to obviate such disadvantages, the use of "dry and liquid ampoules" is recommended, the idea being to mix the medicament and water, contained in separate am-powder, just prior to application.—Südd. Apoth.-Ztg. 1916, v. 56, p. 459–460, through Chem. Abstr. 1917, v. 11, p. 804.

CAPSULES.

Herms, Miss F.: A nontechnical paper describing the manufacture of gelatin capsules.—Spatula, 1917, v. 23, p. 109–110.

Davidson, F. W.: Experimental data relating to insolubility of soft gelatin capsules are presented.—J. Am. M. Assoc. 1917, v. 69, p. 1598–1599.

Anon.: Directions are given for preparing capsules suitable for the administration of castor oil.—Pharm. Era, 1917, v. 50, p. 121.

COMPRESSED TABLETS.

Keller, Fred: Owing to the importance of tablets in hypodermic medication and to the fact that they have practically replaced pills for internal administration, it is thought that the Pharmacopœia should at least have included type formulas for the more important of these preparations.—D. A. Apoth.-Ztg. 1917, v. 68, p. 31.

Street, John Phillips: Tablets obtained from the stocks of practicing physicians showed a variation in weight of from 10 to 20 per cent and a variation in amount of active ingredient stated of from 5 to 50 per cent.—Rep. Conn. Agric. Exper. Sta. 1917, p. 188–189.

van Hallie, E. J.: Notes on the preparation of compressed tablets.—Pharm. Weekblad, 1917, v. 54, p. 1205–1215.

Miller, Reginald: A description of methods for the analysis of [illegible] tablets and for tablets containing salol and quinine sulphate.—Am. J. Pharm. 1917, v. 89, p. 214–217.

II. INTERNATIONAL STANDARDS.

1. THE EVOLUTION OF UNIFORMITY IN PHARMACOPŒIAL STANDARDS AND STANDARDS FOR POTENT MEDICAMENTS.

1. ADOPTION OF BRUSSELS CONFERENCE PROTOCOL.

Maben, Thos.: Notes on the U. S. P. IX. monographs. The lack of attention given the P. I., especially in the case of potent drugs, is criticized.—Chem. & Drug. 1917, v. 89, p. 71–72.

Beringer, George M.: As some of the recommendations made in the protocol of 1902 have not been universally accepted, and as progress in the medical sciences since that time has presented some new problems, there is now great need for another international conference.—Am. J. Pharm. 1917, v. 89, p. 572.

2. FOREIGN PHARMACOPŒIAS.

Editorial: An examination of the pharmacopœias of the world reveals the startling fact that only 10 of them have been revised since 1900, and only three since 1911, five years ago—the British, the Norwegian, and the United States. Only the Argentine standards have, of all the South American States, been revised in this century. An examination of existing pharmacopœias shows scores of drugs hardly known in modern medicine. As an example, *Cnicus Benedictus* (Cardui), of recent notoriety, is recognized in the Belgian, Croatian, German, Japanese, Netherlands, Russian, Swedish, and Swiss pharmacopœias. By comparison, the British and United States pharmacopœias, the most recently revised, are ultrascientific.—Midl. Drug. 1917, v. 51, p. 7.

1. BRITISH.

Anon: A criticism pointing out that the convenient rule of solids by weight and liquids by measure is not consistently followed in the Ph. Brit.—Chem. & Drug. 1917, v. 89, p. 117.

Anon: In pursuance of the medical act of 1858 and of the medical council act of 1862 the following are excluded from the British Pharmacopœia, 1914: Most of the confections, the glycerines, all but three mixtures, most of the syrups, a number of the troches, a number of the powders, and other galenicals.—Chem. & Drug. 1917, v. 89, No. 1958, p. 37.

2. NORWEGIAN.

Anon: A book review of a commentary on the Norwegian pharmacopœia by Frode Lieungh and G. Rustung.—Arch. Pharm. Chem. 1917, v. 24, p. 308.

3. ITALIAN.

Anon.: A discussion of the advisability of omitting the chapter on specialties from the fourth edition of the Ph. Ital.—Giorn. farm. chim. 1917, v. 66, p. 344–346; Boll. chim.-farm. 1917, v. 56, p. 503–505.

Lami, Pio: A discussion relative to the introduction of lecithin into the Codice Ufficiale.—Boll. chim.-farm. 1917, v. 56, p. 34–39.

4. SWISS.

Fleissig, P.: A plea for a revised edition of the Swiss pharmacopœia, which will take into account the advances made since 1907. It is suggested that the chapters on sterilization and ampoules be extended; that newer remedies and physiological assay methods be included; and that certain obsolete drugs and preparations be dropped.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 517–523.

Zörnig: A discussion of the revision of the Ph. Helv. IV with respect to the drugs which it contains.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 613–617.

Anon.: A book review calls attention to a small volume entitled *Extractum Ph. H. IV.* The volume contains formulas for the galenical preparations of the Swiss pharmacopoeia in Latin and is intended for use in the laboratory.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 93.

5. DUTCH.

van der Haar, A. W. A critical review of the fourth edition of the Dutch pharmacopoeia.—Pharm. Weekblad, 1917, v. 54, p. [illegible]–501.

6. BRAZILIAN.

Anon. According to the United Pharmacist, the publication of a Brazilian pharmacopoeia was strongly advocated at the recent medical congress held at Sao Paulo. The French Codex is the work in general use in Brazil at the present time.—Am. Druggist, 1917, v. 65, No. 4, p. 58.

7. DANISH.

Hesse, F. J. Angelo. A short article comparing the drugs and preparations of the Danish pharmacopoeia, 1907, with those of the U. S. P. IX.—D. A. Apoth.-Ztg. 1917, v. 38, p. [illegible], 33–43.

III. COMMENTS ON OFFICIAL ARTICLES.

ACACIA.

Stanford, Addison E. The American supply of gum acacia is stated to be procured largely from Sudan. It is stated, however, that the Somali gum in the Aden market is equal in quality to that of Sudan.—Com. Rep. 1917, No. 24, p. 376.

Waters, C. E., and Tuttle, J. B. A study of the qualitative and quantitative tests for gum acacia. The precipitate formed with basic lead acetate is pronounced to be the most characteristic qualitative test.—J. Ind. & Eng. Chem. 1916, v. 8, p. 413; Am. Druggist, 1917, v. 65, No. 1, p. 32.

Montandon, H. Descriptions of substitutes for gum arabic yielded by Brazilian plants.—Bull. Agric. Intell. 1916, v. 7, p. 1295–1296; through J. Soc. Chem. Ind. 1917, v. 36, p. 155.

Hurwitz, S. H. A report on the use of an acacia-Locke solution for combating the immediate ill effects of lowered pressure following excessive hemorrhage.—J. Am. M. Assoc. 1917, v. 68, p. 699.

ACETANILIDUM.

Merrill, Floyd B., and Adams, Elliott Q. A study of the hydrolysis of acetanilid by means of acids.—J. Am. Chem. Soc. 1917, v. 39, p. 1588–1598.

[illegible], O. Reactions for the identification of acetanilid are described.—J. Chem. Soc. Lond. 1916, v. 110, part 2, p. [illegible]; through Apoth.-Ztg. 1917, v. 32, p. [illegible] and [illegible].

Roberts, J. G.: Two samples of acetanilid examined were considered undesirable, as they were gray in color. Another sample yielded 0.08 per cent excess of ash.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 78.

Emery, W. O.: A description of a method for the estimation of acetanilid and sodium salicylate in mixtures.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 70–71.

Emery, W. O.: A method for the estimation of caffeine, acetanilid, and codeine sulphate in mixtures containing the three substances is described.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 72–73.

Emery, W. O.: A description of a method for the estimation of caffeine, acetanilid, quinine, and morphine in mixtures containing these substances.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 73–74.

ACETONUM.

Asher, Philip: An explantion of the chemistry of the U. S. P., IX, method for the assay of acetone.—Am. J. Pharm. 1917, v. 89, p. 167.

Klein, Friedrich: Acetone as a product of wood distillation often contains methyl alcohol. As the U. S. P. does not prescribe a test for the latter, the author recommends a method for its detection which is based on the solubility of urea in methyl alcohol.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 52.

Hubbard, Roger S.: A description of a titration method for determining minute quantities of acetone.—J. Biol. Chem. 1917, v. 29, p. 14.

Bagster, Launcelot S.: A note on compounds formed by the combination of calcium chloride with acetone.—J. Chem. Soc. 1917, v. 111, p. 494–497.

ACETPHENETIDINUM.

Tunmann, O.: Reactions for the identification of phenacetin are described.—Apoth.-Ztg. 1917, v. 32, p. 289–292 and 298–299, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 551–553.

Miller, Reginald: A description of a rapid method for the approximate determination of phenacetin when mixed with acetanilid.—Am. J. Pharm. 1917, v. 89, p. 156–157.

ACIDUM ACETICUM.

Badsche Anilin and Soda-Fabrik: D. R. P. 294724. A description of a method for the preparation of acetic acid in which acetaldehyde is oxidized by air in the presence of iron compounds and organic salts of alkalies or alkaline earths, including magnesium and aluminum.—J. Soc. Chem. Ind. 1917, v. 36, p. 503.

Roberts, J. G.: A strength of 100.7 per cent was indicated in the examination of one lot of acetic acid which contained an excess of empyreumatic substance.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 79.

ACIDUM ACETICUM GLACIALE.

Klein, Friedrich: Selenium dioxide is recommended as a reagent for testing glacial acetic acid. Upon warming selenium dioxide with acetic acid anhydride, a red precipitate is formed. With glacial acetic acid no precipitation occurs.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 52.

Schoorl, N.: An investigation of glacial acetic acid with reference to its water content.—Pharm. Weekblad, 1917, v. 54, p. 945–949.

Salkowski, E.: A description of a method for the detection of mineral acids in glacial acetic acid.—Zeitschr. Unters. Nahr. u. Genussm. 1916, v. 31, p. 16, through Pharm. Weekblad, 1917, v. 54, p. 946.

ACIDUM ACETYLSALICYLICUM (NONOFFICIAL).

Roberts, J. G.: The fact that plenty of acetylsalicylic acid of excellent quality and fully as desirable as the foreign product is now produced in the United States should be made known to the buying public, so that they will not be compelled to pay the excessive price formerly charged for this article.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 79.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to fix a standard of purity for acetylsalicylic acid.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

Stack, H. F.: Aspirin crystallizes from chloroform in three forms—two as needles and the third as flat, square tablets.—Chem. & Drug. 1917, v. 89, p. 1107.

Tsakalotos, D. E., and Horsch, S.: The fifth installment of a reported research on aspirin deals with the effect of salicylsalicylic acid on the solidification of aspirin in commercial samples.—Bull. soc. chim. France, 1917, v. 23, p. 16–18.

Wolff, Arvid: Data are given showing the velocity constants in the hydrolysis of acetylsalicylic acid, determined in solutions with and without the addition of acid catalyzer.—Svensk Kem. Tidskr. 1917, v. 29, p. 109–112.

Tsakalotos, D. E.: A reply to a criticism by François concerning the melting point of aspirin, which he maintains is uncertain.—J. pharm. et chim. 1917, v. 16, p. 338–339.

Miller, Reginald: A description of a method for the quantitative determination of acetylsalicylic acid when admixed with sodium salicylate.—Am. J. Pharm. 1917, v. 89, p. 347–348.

François, Maurice: Descriptions of tests for the identity and purity of aspirin.—J. pharm. et chim. 1917, v. 15, p. 213–222; see also D. E. Tsakalotos, p. 336–339.

Anon.: A description of a method for the quantitative determination of the combined salicylic acid in acetylsalicylic acid.—Arch. Pharm. Chem. 1917, v. 24, p. 45.

Miller, Reginald: A description of a method for the approximate determination of novaspirin alone or when mixed with aspirin.—Am. J. Pharm. 1917, v. 89, p. 155–156.

Bouvet: After discussing the acetylsalicylates of sodium, lithium, calcium, magnesium, potassium, zinc, copper, silver, and mercury, the author concludes that the calcium salt is best suited for pharmaceutical use, especially in the form of tablets or cachets. A bibliography is appended.—Bull. sc. pharmacol. 1917, v. 24, p. 86–90.

Stiell, W. F.: A report of a case of chronic poisoning due to the continued use of aspirin.—Practitioner, 1917, v. 99, p. 293-294.

Anon.: Notices of judgment Nos. 4575, 4598, 4675, 4677, 4686, 4692, and 4746 relate to the adulteration of aspirin. –S. R. A.–Chem. 1917, p. 107, 138, 233, 235, 244, 250, 313.

Massy and Sauvestre, L.: A discussion of data obtained in the analyses of different samples of aspirin tablets.—Bull. Soc. pharm., Bordeaux, 1917, v. 55, p. 229–234.

Dohme, A. R. L.: All lots of acetylsalicylic acid examined were of good quality. One lot was particularly fine, as it was 99.99 per cent pure and yielded only 0.006 per cent residue on ignition.—Proc. N. W. D. A. 1917, p. 514.

E'we, G. E.: One lot of acetyl salicylic acid examined had a pronounced acetic acid odor, but was otherwise satisfactory. Another lot contained only 61.3 per cent of acetylsalicylic acid, the remainder being a gum resembling tragacanth and free salicylic acid.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 78.

Lea, E. J.: One sample of acetylsalicylic acid examined was adulterated with milk sugar and tartaric acid.—Bull. California Bd. Health, 1917, v. 12, p. 345.

Dohme, A. R. L.: One sample of aspirin was rejected, the melting point being as low as 124° C. Three samples were below 130° C. Two of these had an odor of phenol. —Proc. N. W. D. A. 1917, p. 508.

Sayre, L. E., et al.: One of five samples of aspirin tablets examined was adulterated and misbranded.—Rep. Kansas Bd. Health, 1916. v. 12, p. 427.

[illegible]

[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Congdon, Leon A.	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] p. 62

ACIDUM BENZOICUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to devise methods for distinguishing natural benzoic acid from synthetic benzoic acid.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Dohme, A. R. L.: Organic impurities, which impart a dark color and foreign odor, are frequently noticed in benzoic acid.—Proc. N. W. D. A. 1917, p. 500.

Gilbert, J. C.: About one-half of the lots of benzoic acid examined were of abnormal quality. Six lots had an objectionable yellowish-brown color and yielded excessive amounts of ash. Two of these also contained an excess of carbonizable impurities. One lot was particularly poor, as it yielded 0.12 per cent excess of ash. It also had an objectionable color and odor and was only 98.7 per cent pure.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 78.

Dohme, A. R. L.: One lot of benzoic acid examined was not of U. S. P. quality, as it was low in acidity, yielded 0.024 per cent more residue than the U. S. P. standard of 0.05 per cent, contained more than a normal amount of carbonizable impurities, and had a dark color.—Proc. N. W. D. A. 1917, p. 504.

Sterling, W.: Notes on the detection of benzoic acid in food.—Chem. Ztg. 1916, p. 770; through Pharm. Weekblad. 1917, v. 54, p. 141-142.

ACIDUM BORICUM.

St. John, E. H.: A description of a volumetric method for the determination of boric acid. A feature of importance in the method is the use of methyl red in the presence of glycerin as an indicator.—Am. J. Pharm. 1917, v. 89, p. 8-10.

Kugler, O.: A report on Hill's method for determining boric acid in food products.—Arb. a. d. Gesundheitsamte; through Pharm. Weekblad. 1917, v. 54, p. 186.

Pringle, H.: A report of a case of poisoning by boric acid mistaken for magnesium sulphate.—Lancet, 1917, v. 193, p. 162.

ACIDUM CITRICUM.

Anon.: A comprehensive article dealing with the preparation of citric acid by fermentation. –Rev. Farm. 1917, v. 60, p. 107–121.

Broeksmit, T. C. N.: Methods for distinguishing between citric and tartaric acid. The presence of tartaric acid in citric acid can be demonstrated by the formation of potassium hydrogen tartrate.—Pharm. Weekblad, 1917, v. 54, p. 686–687.

Obregon y Garcia, J. G.: A description of a method for differentiating between citric and tartaric acids. The reagents employed are a 1:1000 aqueous solution of methylene blue and an aqueous solution of potassium permanganate of the same strength.—Farm. Españ. 1917, v. 49, p. 8.

Broeksmit, T. C. N.: A method for differentiating between citric and malic acids. Both malic and citric acids answer to the iodoform test, but can be distinguished by the fact that barium malate is not precipitated, either in neutral solution or in the presence of acetic acid.—Pharm. Weekblad, 1917, v. 54, p. 1371–1373.

ACIDUM DIETHYLBARBITURICUM (NONOFFICIAL).

Enell, Henrik: A note on the use of iodoeosin as an indicator in the titration of the monosodium salt of diethylbarbituric acid (veronal).—Ztschr. analyt. Chem. 1916, v. 55, p. 452–459.

ACIDUM FORMICUM.

Bredig, G., and Carter, S. R.: British patent No. 9762. A method for obtaining formic acid by the interaction of H and CO_2 at high pressures in the presence of catalytic agents and solvents. Chem. Abstr. 1917, v. 11, p. 86.

Tsiropinas: A volumetric method for the determination of formic acid or formates in the presence of hydroxides, carbonates, oxalates, and acids.—J. Ind. & Eng. Chem. 1917, v. 9, p. 110–111.

ACIDUM GALLICUM.

Mito, M.: Methods for the preparation of tannic acid, gallic acid, and pyrogallol are described in detail.—J. Chem. Ind. Tokyo, 1917, v. 20, p. 720–737.

ACIDUM HYDRIODICUM DILUTUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association states that the U. S. P. process for hydriodic acid yields a product which does not meet the incineration test.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

ACIDUM HYDROCHLORICUM.

Coehn, Alfred, and Stuckardt, Karl. An investigation of the action of light on the formation and decomposition of the halogen acids.—Ztschr. physik. Chem. 1916, v. 91, p. 722–761.

[illegible] Chemical Works. British patent No. 107,315 describes the purification of hydrochloric acid by means of zinc chloride.—Chem. Abstr. 1917, v. 11, p. 3395.

Villiers, A. A description of a method for the quantitative determination of ammonia and of hydrochloric acid by weighing as ammonium chloride.—Bull. soc. chim. France, 1917, v. 21, p. 300–308.

Sainsbury, H. The direct application of hydrochloric acid to the skin along the line of the inflamed and painful nerve is recommended in the treatment of neuritis.—Lancet, 1917, v. 11, p. 911.

ACIDUM HYDROCHLORICUM DILUTUM.

Bachman, C. Five samples of dilute hydrochloric acid were analyzed. They assayed 9.75, 10.16, 7.70, and 12.80, per cent, respectively.—Proc. Minnesota Pharm. Assoc. 1917, p. 140.

Jackson, Frank A. The samples of dilute hydrochloric acid examined varied in acid strength from 9.4 to 13.4 per cent. A few of the samples were prepared from commercial hydrochloric acid.—Rep. Rhode Island F. & D. Com. 1916, p. 8.

ACIDUM HYDROCYANICUM DILUTUM.

Anderson, George W. An investigation to determine the sensitiveness of methods employed for the detection of hydrocyanic acid.—J. Soc. Chem. Ind. 1917, v. 36, p. 195–200.

Kolthoff, I. M. Researches on the detection and quantitative estimation of small quantities of hydrocyanic acid. A study of analytical methods in current use for cyanogen compounds.—Pharm. Weekblad, 1917, v. 54, p. 1157–1171.

Willaman, J. J. A discussion of methods in use for the determination of hydrocyanic acid in plant tissues.—J. Biol. Chem. 1917, v. 29, p. 25.

ACIDUM HYPOPHOSPHOROSUM.

Bollinger, C. H. The fact that the U. S. P., IX, does not provide a test for sulphuric acid in hypophosphorous acid is regarded as a serious omission. The odor of sulphur compounds developed in certain preparations containing hypophosphorous acid is stated to be very annoying.—Proc. Minnesota Pharm. Assoc. 1917, p. 140.

ACIDUM LACTICUM.

Dohme, A. R. L. American manufacturers are having difficulty in supplying lactic acid of U. S. P. quality. The demand for technical acid (about half the strength of the U. S. P. acid), dark in color and unpleasant in odor, is strong enough to take care of the supply, and manufacturers find little incentive to purify it in quantity. Acid of medicinal quality is, in consequence, very difficult to obtain, except in very small lots. Proc. N. W. D. A. 1917, p. 509.

Anon.: Some of the so-called lactic acid on the market in Spain is a weak solution of citric acid. Chem. & Drug. 1917, v. 89, p. 877.

Phelps, I. K., and Palmer, H. E.: A first paper on the identification and estimation of lactic acid in biological products.—J. Am. Chem. Soc. 1917, v. 39, p. 136–149.

ACIDUM NITRICUM.

Withrow, James R.: A discussion of the sophistication of nitric acid with special reference to the economic aspect of the problem.—J. Ind. & Eng. Chem. 1917, v. 9, p. 771–776.

Schaefer, K.: An optical study of the constitution of nitric acid.—Ztschr. anorg. Chem. 1916, v. 97, p. 285–311.

Smith, L.: A note on the use of diphenylamine and diphenylbenzidine for the colorimetric estimation of nitric acid. Ztschr. anal. Chem. 1917, v. 56, p. 28–42, through Analyst, 1917, v. 42, p. 90.

ACIDUM NITRICUM DILUTUM, U. S. P., VIII.

Lascoff, J. Leon: It seems strange that, while formulas for the dilution of most important acids are given in the U. S. P. IX, none appears for diluted nitric acid.—Am. Druggist, 1917, v. 65, No. 5, p. 25.

ACIDUM NITROHYDROCHLORICUM DILUTUM.

Casey, F. W.: One sample of diluted nitrohydrochloric acid examined was rejected because it was not U. S. P. in quality.—Bull. Michigan D. & F. Dept. 1917, No. 262–263, p. 13.

ACIDUM OLEICUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to devise a simple method for the estimation of solid fatty acids in oleic acid. An acid containing stearic acid is desirable for some lines of manufacture.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

Engelhardt, H.: One lot of oleic acid was rejected on account of containing too large a proportion of solid fatty acids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

ACIDUM PHENYLCINCHONICUM.

Rotter, Luise: Notes on the physiological action of atophan and some of its derivatives.—Ztschr. exper. Path. u. Therap. 1917, v. 19, p. 176–197.

ACIDUM PHOSPHORICUM.

Klein, Friedrich: Instead of the accurate but rather long method for the determination of phosphoric acid given in the U. S. P., titration with normal KOH V. S. and phenolphthalein is recommended as being accurate enough for all practical purposes.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 52.

Shuey, Philip McG.: A study of the volumetric or Pemberton method for determining phosphoric acid, with some experiments showing the influence of temperature and the sulphuric acid radical on results.—J. Ind. & Eng. Chem. 1917, v. 9, p. 367–370.

Smith, J. H.: An experimental study of the estimation of phosphoric acid and phosphates by alkalimetric methods.—J. Soc. Chem. Ind. 1917, v. 36, p. 415–419.

[illegible]: A description of a volumetric method for the quantitative estimation of phosphoric acid.—J. pharm. et chim. 1917, v. 16, p. [illegible]

Clarens, J.: A description of a method for the determination of P_2O_5 as ammonium phosphomolybdate.—Bull. soc. chim. France, 1917, v. 23, p. 159–163.

[illegible], A.: A criticism of J. Clarens's method for the estimation of P_2O_5 as ammonium phosphomolybdate.—Bull. soc. chim. France, 1917, v. 23, p. 305–306.

Balareff, D.: A report of an investigation dealing with the acidimetric estimation of orthophosphoric acid.—Zeitsch. anorg. Chem. 1916, v. 97, p. 143–146, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 101.

Balareff, D.: Directions are given for the titration of H_3PO_4, $H_4P_2O_7$, and HPO_3 in the same solution with sodium hydroxide, the indicators used being methyl orange, phenolphthalein, and silver nitrate (neutral).—Zeitsch. anorg. Chem. 1917, v. 99, p. 184–186, through J. Chem. Soc. 1917, v. 112, part 2, p. 506.

Dohme, A. R. L.: One sample of phosphoric acid of commercial quality examined contained an excess of heavy metals and arsenic.—Proc. N. W. D. A. 1917, p. 514.

ACIDUM SALICYLICUM.

[illegible]: British patent No. [illegible]: A method for the preparation of salicylic acid by the electrolytic oxidation of cresols is described.—J. Soc. Chem. Ind. 1917, v. 36, p. 382.

Dohme, A. R. L.: Several manufacturers have found it difficult to free salicylic acid from organic impurities, which darken it and sometimes impart a phenolic odor. Pure white acid is difficult to obtain.—Proc. N. W. D. A. 1917, p. 509.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to have a method for distinguishing natural from synthetic salicylic acid and salicylates.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Waterman, H. I.: In an investigation of the alkaline acid equivalents of various substances it was found that salicylic acid differs from its isomerides by displaying the properties of a monobasic acid.—Chem. Weekblad, 1917, v. 14, p. 1126–1131.

Tunmann, O.: Reactions for the identification of salicylic acid are described.—Apoth.-Ztg. 1917, v. 32, p. 289–292 and 298–299, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 551–553.

Steenbergen, H. D.: An investigation of various methods for the quantitative determination of salicylic acid in foods.—Chem. Weekblad, 1917, v. 14, p. 914–921.

Anon.: A description of a method for the quantitative determination of the combined salicylic acid in acetylsalicylic acid.—Arch. Pharm. Chem. 1917, v. 24, p. 45.

Bartholon, P., and McNeil, A.: A comparative study of the toxic effects of natural and synthetic salicylic acids.—Am. J. M. Sc. 1917, v. 153, p. 738; J. Am. M. Assoc. 1917, v. 68, p. 1661.

Roberts, J. G.: Five lots of salicylic acid examined were satisfactory except that they each contained a slight excess of organic impurities.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 78.

ACIDUM SULPHURICUM.

Richmond, H. D., and Merrywether, J. E.: A description of a rapid method for the estimation of the strength of sulphuric acid. The method makes use of the fact that heat is evolved on dilution with water.—Analyst, 1917, v. 42, p. 273–274.

Anon.: A note on the application of the Komarowsky reaction as a test of purity of concentrated sulphuric acid.—Chem. Ztschr. 1917, v. 41. p. 132, through J. Soc. Chem. Ind. 1917, v. 36, p. 545.

Steenbergen: A note on the degree of purity of sulphuric acid necessary for its suitability as a reagent for the nitrate test. A suitable acid may be obtained by repeatedly shaking with mercury and allowing to stand until free from bubbles.—Chem. Weekblad, 1917, v. 14, p. 647–648.

Pérégrin, J. B.: A critical examination of Lunge's method for the rapid determination of arsenic in sulphuric acid.—Ann. chim. analyt. 1917, v. 22, p. 24–45.

Kling, André: The Gutzeit test is recommended for the detection of arsenic in sulphuric acid, and a convenient form of apparatus for the purpose is described.—Ann. Falsif. 1917, v. 10, p. 451–453.

Palet, Luciano P. J.: A test for the detection of selenium in sulphuric acid is based upon the color produced with aspidospermine.—Anales soc. quim. Argentina, 1917, v. 5, p. 121–123.

[illegible], E. and Egnat, M.: A method for the detection and estimation of small quantities of free sulphuric acid in the presence of sulphates is outlined.—Ann. chim. analyt. 1917, v. 22, p. 61-66.

For patents relating to the manufacture of sulphuric acid, see Chem. Abstr. 1917, v. 11 and J. Soc. Chem. Ind. 1917, v. 36.

ACIDUM SULPHURICUM AROMATICUM.

Dohme, A. R. L.: The U. S. P. assay process for aromatic sulphuric acid needs revision, as the chemical reaction involved is reversible as long as alcohol is present.—Proc. N. W. D. A. 1917, p. 281.

Jackson, Frank A.: The samples of aromatic sulphuric acid examined fell from a fraction of 1 per cent to 6 per cent below the U. S. P. strength of 20 per cent.—Rep. Rhode Island F. & D. Com. 1917, p. 32.

ACIDUM TANNICUM.

Mito, M.: A description of a method for preparing tannic acid, gallic acid, and pyrogallol from Japanese gall nuts.—J. Chem. Ind. Tokyo, 1917, v. 20, p. 720-736.

Lauffmann, R.: A general scheme is given for the identification of the vegetable tannins by the ordinary methods. Methods for distinguishing between the vegetable and synthetic tannins are also described.—Chem. Ztg. 1917, v. 41, p. 275-276, 286-288, through J. Soc. Chem. Ind. 1917, v. 36, p. 513.

[illegible], L. F.: A continuation of experiments to determine the constitution of tannin.—Chem. Abstr. 1917, v. 11, p. 3039.

Kobert, R.: The biological detection and evaluation of tannins. The author describes three methods of finding the maximum dilution at which a tannin solution exerts an astringent action, as shown by the coagulation of fresh blood corpuscles.—Chem. Ztg. 1917, v. 41, p. 49, through J. Soc. Chem. Ind. 1917, v. 26, p. 297.

Balderston, L.: A simple method for the estimation of tannin is based on the precipitation of the latter with gelatin.—J. Am. Leather Chem. Assoc. 1917, v. 12, p. 59-60.

Hugues: Stable tannic acid solutions may be prepared by using sterilized water which has been recently distilled. An abstract.—Presse Medicale, 1917, v. 25, p. 21.

Scoville, W. L.: One lot of tannic acid was rejected on account of its dark color.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

ACIDUM TARTARICUM.

Zwikker, J. J. L.: A discussion of researches tending to show the nonexistence of metatartaric acid.—Chem. Abstr. 1917, v. 11, p. [illegible]

[illegible]: A method for the detection of tartaric acid in syrup of lemon.—Pharm. Weekblad, 1917, v. 54, p. 686-687.

Bouvet, M.: Notes on some incompatibilities of tartaric acid which become evident in tablet making. –Bull. sc. pharmacol. 1917, v. 24, p. 90.

ACONITUM.

Achard, H. J.: A study of aconite, including its history, galenical preparations, toxicology, and therapeutic uses.—Am. J. Clin. Med. 1917, v. 24, p. 35–37, 192–194, 273–276.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to improve the assay method for aconite root, and recommends the elimination of extract of aconite from the U. S. P.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Anon.: In a criticism of the aconite assay, H. Engelhardt states that physiological experiments show that powdered extract of aconite is almost worthless and that the fluid extract deteriorates very rapidly. The author therefore urges that the assay process for both the powdered extract and fluid extract of aconite be revised, and that some further work be done in regard to the present assay methods.—Pharm. Era, 1917, v. 50, p. 236–237.

Millard, N. P.: Suggestions for facilitating the computation of the alkaloids in aconite root, aconite tincture, and aconite liniment when assayed according to the methods given in the Ph. Brit. 1914.—Pharm. J. 1917, v. 99, p. 291.

Rippetoe, J. R.: It is stated that experience has shown that methyl red indicator gives a better end point but a somewhat lower result than cochineal in the titration of the aconite alkaloids.—Drug. Circ. 1917, v. 61, p. 501; J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

Dohme, A. R. L.: The aconite assay is misleading and unreliable because its end point is not necessarily aconitine. Methyl red gives a more distinct end reaction, and the results obtained are more nearly n agreement with the physiological tests.—Proc. N. W. D. A. 1917, p. 502.

Pittenger, Paul S.: In the U. S. P. biological method for the standardization of aconite, the proposed "time limit" of 12 hours is too short, since the test consumes at least 13 hours. A 24-hour limit s more desirable, as the 13-hour test can not be completed in the ordinary working day. –J. Am. Pharm. Assoc. 1917, v. 6, p. 869.

Schulze, Heinrich, and Liebner, A.: A report of investigations to letermine the constitution of the aconite alkaloids. The paper deals especially with the constitution of the derivatives of aconite, pyraconitine, and pyraconine.—Arch. Pharm. 1916, v. 254, p. 567–583, hrough J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 470.

Alsberg, C. L.: Examination by the Bureau of Chemistry of samples of aconite obtained in import and interstate trade has disclosed that Japanese aconite" (*Aconitum fisheri* Reich) has been substituted in some instances for *Aconitum napellus* L. A simple method for detecting the adulteration is given.—S. R. A. Chem. 1917, No. 20, p. 66–67.

Dohme, A. R. L.: The few samples of Japanese aconite root examined were found to be low in alkaloidal content as compared with the official drug.—Proc. N. W. D. A. 1917, p. 507.

Roberts, J. G.: One lot of aconite root examined had a low alkaloidal content, a sample from one bag showing 0.15 per cent and from another 0.44 per cent. This was partially due to the fact that the lot was insufficiently dried. However, the lot was of inferior quality as, after drying, it contained only 0.44 per cent of alkaloids. A tria sample of aconite root containing 0.68 per cent alkaloids was in poor physical condition, as it contained 15 per cent of stems and was about one-third moldy.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 79.

Engelhardt, H.: Of four samples of aconite root examined thre were rejected, as they assayed below 0.5 per cent of aconitine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Dohme, A. R. L.: One lot of aconite root was rejected because it contained about 15 per cent of stems and was about one-thir moldy.—Proc. N. W. D. A. 1917, p. 514.

Anon.: Of 12 samples of aconite root assayed, the aconitine content of 10 was above standard and 2 below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

ADEPS.

Carles, P.: An account of the preparation and purification o lard intended for use as a pomade base.—Repert. pharm. 1917, v. 28, p. 225–226.

Issoglio, Giovanni: Data showing the oxidisability numbers o different samples of lard are given.—Giorn. farm. chim. 1917, v. 66, p. 249.

Arnold, W.: The results obtained in testing 45 samples of lar for foreign fats by the Bömer method are presented and discussed.—Ztschr. f. Unters. Nahr. u. Genussm. 1916, v. 31, p. 377–381.

Engelhardt, H.: Descriptions of German substitutes for lard with directions for making the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 56.

Anon.: A list of formulas for the preparation of substitutes fo lard. An abstract.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 146.

Anon.: Of 71 samples of benzoinated lard examined 30 were no of U. S. P. standard.—Bull. North Dakota Agric. Exper. Sta. through J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

ADEPS LANÆ.

Dohme, A. R. L.: Wool fat of high quality is now obtained. American and English manufacturers have learned how to purif crude fat, and the purified product is entirely satisfactory.—Proc. N. W. D. A. 1917, p. 511.

Anon.: Notes on the preparation and purification of wool fat.—Pharm. Ztg. 1916, p. 620, through Pharm. Weekblad, 1917, v. 54, p. 376.

Salisbury, O. B.: An account of the commercial preparation and purification of wool fat.—Pharm. Era, 1917, v. 50, p. 279–281.

Röhmann, F.: From an investigation of the constituents of wool fat it is concluded that the latter consists of a mixture of the esters of cholesterol and of the alcohols of the fatty series, including ceryl alcohol and alcohols with a smaller number of carbon atoms.—Biochem. Ztschr. 1916, v. 77, p. 298–328, through J. Soc. Chem. Ind. 1917, v. 36, p. 346.

Scoville, W. L.: Wool fat of medicinal quality is hard to obtain. That on the market is usually of dark color, strong in odor, and frequently shows an excess of sulphur compounds.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Roberts, J. G.: All of the lots of wool fat which were of domestic origin were of satisfactory quality, but an improvement in color is desired, as the color is deeper than that usually found in the foreign products.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 79.

Engelhardt, H.: A large shipment of anhydrous wool fat was rejected because the acid number was too high, probably due to the presence of resin. The product had a very sticky consistence and did not readily mix with water.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Dohme, A. R. L.: Eimer and Amend report a case of adulteration of lanolin with 50 to 60 per cent of petrolatum.—Proc. N. W. D. A. 1917, p. 508.

New York committee: Several lots of wool fat examined contained petrolatum and resin.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Engelhardt, H.: A list of German substitutes for wool fat, with directions for preparing the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 58.

Axelrad, Sol.: Experiments on the preparation of cetylic alcohol and a discussion of its suitability as a substitute for lanolin.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1123–1125.

ADEPS LANÆ HYDROSUS.

Sayre et al.: Two of six samples of hydrous wool fat tested contained an excess of free fatty acid.—Rep. Kansas Bd. Health, 1917, v. 13, p. 169.

ÆTHER.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to devise tests for ether to be used for anesthesia.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Dott, D. B. A criticism of the Ph. Brit. fuchsin test for methyl compounds in ether. It is stated that specific directions should be given for preparing the fuchsin solution, and that the oxalic-acid solution should be made one-half the specified strength.—Pharm. J. 1917, v. 98, p. 246; see also v. 99, p. 285; and Chem. & Drug. 1917, v. 89, p. 1060.

Schulz, D. The observations of Herzog with respect to ether for narcosis are confirmed. It is suggested that in the case of negative results with the KOH test of Ph. Germ., it be repeated after the ether has been reduced by evaporation to two-thirds or one-half the original volume.—Apoth. Ztg. 1916, v. 31, p. 290–291, through Chem. Abstr., 1917, v. 11, p. 1719.

Perkins, R. L. A process for the estimation of alcohol and water in ether intended for use as an anesthetic is described. The method differs from that of Mallinckrodt and Alt in that the water is estimated from the specific gravity of the original mixture.—J. Ind. & Eng. Chem. 1917, v. 9, p. 521–523.

Lyons, A. B. A description of a method for computing the alcohol and water content of ether from the specific gravity of the mixture.—J. Am. Pharm. Assoc. 1917, v. 6, p. 553–554.

Lyons, A. B. A supplemental note on the testing of ether.—J. Am. Pharm. Assoc. 1917, p. 716.

van Leeuwen, W. Storm. A discussion of data obtained in the physiological standardization of narcotics.—Pharm. Weekblad. 1917, v. 54, p. 1470–1479.

McCardie, W. J. A report of experiments to determine the most satisfactory mixture of ether and chloroform for use in war surgery.—Brit. M. J. 1917, v. 1, p. 508.

ETHYLMORPHINÆ HYDROCHLORIDUM.

Sanchez, Juan A. Three tests for the identification of dionine are described. Rev. farm. 1917, v. 60, p. 699.

AGAR.

Farwell, Oliver Atkins. The definition for agar should be corrected to exclude species of *Gracilaria* and *Gloiopeltis* as sources of origin of agar. Furthermore, "Fam. *Gelidiaceae*" should be used instead of "Class *Rhodophyceae*."—Drug Circ. 1917, v. 61, p. 173.

Takeo, Y. *Gelidium Amansii*, *G. Japonicum*, *G. Pacificum*, *G. subcostatum*, and *Pterocladia capillacea* are the algæ which are exported from Formosa for the preparation of agar-agar. *Gelidium Amansii* yields the best agar-agar. The others give a product of lower quality and may be looked upon as adulterants.—J. pharm. et chim. 1917, v. 16, p. 175; see also Pharm. J. 1917, v. 98, p. 257.

Fellers, Carl R.: Some notes on the composition of agar, its properties and use as a jellifying medium.—Pure Products, 1917, v. 13, p. 177–185.

Fellers, C. R.: A report of bacteriological studies of agar-agar.—Soil Science, 1916, v. 2, p. 255–290, through Physiol. Abstr. 1917, v. 2, p. 630.

Brown, Orville H. and Sweek, William O.: A note on the use of liquid agar in the treatment of constipation.—J. Am. M. Assoc. 1917, v. 69, p. 467–468.

AGARICUS, N. F.

Farwell, Oliver Atkins: The proper designation for agaricus under *Polyporus* is *Polyporus Laricis* (Jacq.) Scopoli.—Drug. Circ. 1917, v. 61, p. 229.

Rusby, H. H.: What is more active or more definite in action than agaricin, or what can be handled therapeutically better? Agaricus is in the N. F.; why shouldn't agaricin be in the U. S. P.?—Pract. Drug. 1917, v. 35, No. 3, p. 27.

McCartney, Ethel: A pharmacological study of agaricin. J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 83–94.

ALCOHOL.

Stein, Leo: A short paper giving an account of the manufacture of alcohol.—Pure Products, 1917, v. 13, p. 186–190.

Thatcher, F., and Stiles, L. M.: German patent No. 291073 describes a method for the preparation of alcohol from cactus plants.—Chem. Abstr. 1917, v. 11, p. 1248.

Anon.: A method for the preparation of alcohol from calcium carbide is described. The calcium carbide is hydrolized and the resulting acetylene oxidized to acetic aldehyde, which is finally reduced to alcohol by means of hydrogen. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 315–316.

Lebedev, Alexandre: Researches to determine if lactic acid is an intermediate product in alcohol fermentation.—Biochem. J. 1917, v. 11, p. 189–196.

Popesco: A description of a method for decolorizing alcohol which has been stored in iron containers.—Pharm. Zentralh. 1916, p. 693, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 419.

Vaughan, Victor C.: Tests for determining the purity of alcohol intended for use in work on protein poisons are described.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 57–58.

Reid, E. Emmet: Identification of alcohols. The method consists in converting the alcohol into the acid phthalate, treating the sodium salt of the latter with $p\text{-}O_2NC_6H_4CH_2Br$, and isolating the resulting alkyl nitrobenzyl phthalate.—J. Am. Chem. Soc. 1917, v. 39, p. 1249–1255.

[illegible], George C.: Notes on various methods for determining the alcoholic content of medicinal preparations.—Bull. Pharm. 1917, v. 31, p. 26–28.

Villedieu, and Hébert: A method for the estimation of ethyl alcohol in dilute solutions (0.1 to 1 per cent). The iodometric method described depends on the fact that, at a definite dilution, the quantity of alcohol converted into iodoform is constant.—J. pharm. et chim. 1917, v. 15, p. 41–44.

[illegible], C. J., and Marden, J. W.: A method for the determination of alcohol is based on the fact that C_2H_5OH may be separated from aqueous solution by saturating the latter with KF.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1126–1127.

Lee, E. J.: Three samples of alcohol examined were found to be deficient in strength.—Bull. California Bd. Health, 1917, v. 12, p. 555.

Strauss: A report of investigations to determine the disinfecting properties of alcohol. A 90 per cent alcohol produces the same effects as tincture of iodine or spirit of thymol. Weaker solutions of alcohol are not as effective.—Beitr. klin. Chir. v. 99, p. 402, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 36.

Fantus, Bernard: The rôle of alcohol in the welfare of the human race from the standpoint of pharmacology and therapeutics.—J. Am. M. Assoc. 1907, v. 69, p. 10–12.

Linossier, G.: An investigation of the influence of temperature on the toxicity of alcohol. The data presented have an interesting application in the case of administration of alcohol to patients with fever.—Compt. rend. soc. biol. 1917, v. 80, p. 584–587.

Schulz, Hugo: An investigation of the effect of alcohol on the color sense. The effects of different doses and dilutions on seven different individuals are reported.—Arch. ges. Physiol. 1916, v. 164, p. 274–293 through Physiol. Abstr. 1917, v. 2, p. 461. See also Arch. ges. Physiol. 1917, v. 166, p. 217–239.

Kent, A. F. S.: An address on the effect of alcohol in fatigue.—Lancet, 1917, v. 2, p. 107–111.

Higgins, Harold L.: A study of the effect of alcohol on the respiration and gaseous metabolism in man.—J. Pharmacol. 1917, v. 9, p. 441–472.

ALCOHOL DEHYDRATUM.

[illegible], L.: Swiss patent No. 74,941 describes the preparation of absolute alcohol by the use of anhydrous copper sulphate as the dehydrating agent.—Chem. Abstr. 1917, v. 11, p. 2807.

Nussbaum: A method for the estimation of traces of water in alcohol is based on the fact that a mixture of equal volumes of absolute alcohol and light petroleum ether is homogeneous when heated slightly, but becomes turbid when cool. The point at which the turbidity appears is sharply defined, but is raised by about 16° when the alcohol contains 1 per cent of water. Schweiz. Apoth.-Ztg. 1917, v. 55, p. 99.

ALCOHOL, DENATURED (NONOFFICIAL).

Anon.: Formulas for the denaturing of alcohol in accordance with T. D. 2576 are given.—N. A. R. D. J. 1917, v. 25, p. 319.

Warman, L. E.: The presence of copper as an impurity in alcohol denatured, according to Treasury formula No. 25, is reported.—Oil, Paint & Drug Rep. 1917, v. 92, No. 20, p. 20.

G. d. C.: A review of a pamphlet on the methods of denaturing alcohol by E. Simonsen.—Chem. Weekblad, 1917, v. 14, p. 536–537.

Anon.: A book review calls attention to a volume on denatured alcohol by R. P. Duchemin. The work gives a history of denatured alcohol, its various industrial uses, and the governmental regulations applicable to its manufacture in France.—Com. Rep. 1917, No. 20, p. 309.

ALCOHOL, METHYL (NONOFFICIAL).

Elvove, Elias: Descriptions of improvements in the Simmonds' application of the Denigès' test for the detection of small quantities of methyl alcohol.—J. Ind. & Eng. Chem. 1917, v. 9, p. 295–297.

Mannich and Geilmann: A description of a method for the identification of methyl alcohol by means of catalytic dehydrogenation. Briefly, the method consists of passing the vapors of methyl alcohol over pumice stone, impregnated with reduced iron and heated to a temperature of 280 to 300° C. The formaldehyde formed is then identified by a colorimetric test. An abstract.—Arch. Pharm. 1916, v. 254, p. 50–64, through Giorn, farm. chim. 1917, v. 66, p. 369–370.

Sailer: A note on the use of a solution of β-naphthol in concentrated sulphuric acid for the detection of methyl alcohol.—Pharm. Weekblad, 1917, v. 54, p. 1172 from Pharm. Ztg. 1917, p. 143.

von Fellenberg, T.: Researches to determine the modes of combination of methyl alcohol in plants. A method for the determination of methyl alcohol in spices is described.—Mitt. Lebensm. Hyg. 1917, v. 8, p. 1–29.

Eisenberg, A. A.: A report of visceral changes in cases of wood-alcohol poisoning due to inhalation of the vapors.—Am. J. Public Health, 1917, v. 7, p. 765–771.

Ruggeri, E.: A report of researches to determine the changes in lipoid content in acute poisoning by methyl alcohol.—Chem. Abstr. 1917, v. 11, p. 499.

ALETRIS, N. F.

Alsberg, C. L.: Examination of samples of unicorn root obtainable in interstate trade disclosed the presence of excessive amounts of sand, and in one case adulteration with false unicorn root, *Chamaelirium luteum*.—S. R. A. Chem. 1917, No. 20, p. 59.

ALLIUM. N. F.

Minchin, W. C.: Observations on the germicidal and therapeutic action of garlic.—Med. Press, 1917, v. 154, p. 105, through Year-Book of Pharmacy, 1917, p. 222.

Garman, Walter: A short discussion of the value of garlic in treating septic conditions.—Critic and Guide, 1917, v. 20, p. 455–456.

ALOE.

Remington, Joseph P.: A short historical note concerning an incident which led to the introduction of purified aloe into the Pharmacopœia.—Meyer Bros. Drug. 1917, v. 38, p. 116.

Bellinger, C. H.: Purified aloe has been dropped from the U. S. P. as the present market affords an aloe that is not adulterated in the crude manner which was indicated by the method provided for purification.—Northwestern Druggist, 1917, v. 18, No. 1, p. 34.

Collignier, Ch.: Analytical data relative to the aloin, resin, emodin, water, and ash content of aloe are given.—Rev. chim. industrielle, 1917, v. 26, p. 176–177.

Beal, George D., and Okey, Ruth: A description of a method for the qualitative identification of the drugs containing emodin.—J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

Hubbard, W. S.: Methods for the identification of emodin-bearing drugs are described.—J. Ind. & Eng. Chem. 1917, v. 9, p. 518–521.

Léger, E.: An investigation to determine the constitution of the bromo derivatives of aloe-emodin.—J. pharm. et chim. 1917, v. 16, p. 5–8.

Roberts, J. G.: Socotrine aloe of U. S. P. quality is difficult to obtain. Practically all samples examined contained excessive amounts of water, gum, and inorganic impurities and yielded an excess of ash. One lot of Cape aloe examined during the past year was of U. S. P. quality except that it contained 1.6 per cent excess of water.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 70.

Scoville, W. L.: One lot of aloe examined contained no aloin.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

ALOINUM.

Léger, E.: A résumé of work already published on the aloins.—Ann. chim. Paris, 1916, v. 6, p. 318–381.

Seel, E., and Kelber, C.: Data obtained in the determination of the molecular weight of aloin and its products of oxidation are presented.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2364–2368, through J. Chem. Soc. 1917, v. 112, part 1, p. 41.

Seel, E., et al.: A chemical study of the products of oxidation of aloin.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 759–764, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 577.

ALTHÆA.

Gutbier, A., and Weise, G. L.: Notes on the preparation and general properties of the coloidal solutions obtained by the extraction of marsh mallow roots. -Kolloid-Ztschr. 1916, v. 19, p. 177-191, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 21. See also Chem. Abstr. 1917, v. 11, p. 1349.

ALUMINI HYDROXIDUM.

Crouzel, E.: Observations on the employment of aluminum hydroxide as an excipient for the preparation of remedies intended for external application. The aluminum hydroxide is intended to take the place of vaseline, lanoline, etc.—Répert. pharm. 1917, v. 28, p. 258; J. pharm. et chim. 1917, v. 16, p. 247.

Rakuzin, M. A., et al.: A report of investigations dealing with the adsorptive power of aluminum hydroxide and its behavior toward aqueous solutions of egg albumen. -J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 95-97 and 99-105, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 73.

Rakuzin, M. A., and Flier, G. D.: Data on the absorption of toxins and antitoxins by aluminum hydroxide.—Physiol. Abstr. 1917, v. 2, p. 100.

AMMONII BROMIDUM.

Anon.: Notice of judgment No. 4573 relates to the adulteration of ammonium bromide.—S. R. A.-Chem. 1917, p. 105.

AMMONII CARBONAS.

Gloor, F.: One lot of ammonium carbonate examined, although translucent, contained only 27.6 per cent of ammonia (NH_3); the U. S. P. requires not less than 30 per cent, nor more than 32 per cent. —Proc. Pennsylvania Pharm. Assoc. 1917, p. 79.

AMMONII CHLORIDUM.

Roberts, J. G.: A sample from one lot of ammonium chloride examined left a residue after ignition of 0.58 per cent, which is considerably above the U. S. P. standard of not more than 0.05 per cent. The lot had a decided yellow color. —Proc. Pennsylvania Pharm. Assoc. 1917, p. 80.

AMMONII IODIDUM.

Broeksmit, T. C. N.: Pure ammonium iodide is prepared by the action of hydrogen peroxide on ammonium hydroxide and iodine.—Pharm. Weekblad, 1917, v. 54, p. 1373-1374.

AMYGDALA DULCIS.

Farwell, Oliver Atkins: According to the laws of priority, the proper designation for sweet almond under *Prunus* is *Prunus com-*

source (Jno. N. Farwell agt. Dobbs, Mill & Farwell).—Drug. Circ. 1917, v. 61, p. 173.

AMYLIS NITRIS.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate of deterioration of amyl nitrite, if any, when kept in bulk.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

Engelhardt, H.: Four lots of amyl nitrite were rejected for being below the U. S. P. standard. They assayed 72.6, 70, 71.5 and 74 per cent, respectively.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

AMYLUM.

Shipley, A. E.: A note on bracken fern as a source of starch. The starch content is stated to be from 17 to 23 per cent.—Analyst, 1917, v. 42, p. 144-145.

Baumann, C. and Grossfeld, J.: A polarimetric method for the estimation of starch in the presence of other optically active substances is described. The method is based on the fact that raw or soluble starch is completely precipitated by lead tannate.—Ztschr. Untersuch. Nahr. u. Genussm. 1917, v. 33, p. 97-103, through Analyst, 1917, v. 42, p. 365.

von Fellenberg, T.: A direct method for the estimation of starch depends on the solubility of starch in calcium chloride solution, its precipitation by iodine and the decomposition of the precipitate by alcohol.—Mitt. Lebensm. Hyg. 1916, v. 7, p. 369-382, through J. Soc. Chem. Ind. 1917, v. 36, p. 935.

von Kaufmann, Wilhelm: A criticism of Woker's work on which she based her assumption that formaldehyde acts like diastase in the hydrolysis of starch.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 198-202, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 251.

Lumière, Auguste: A report on the value of starch iodide in the treatment of infected wounds.—Compt. rend. acad. sc. 1917, v. 165, p. 376-377.

ANISUM.

Anon.: An account of the production of anise seed with special reference to growing the same in France and French territory.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 224-225.

ANTIMONII ET POTASSII TARTRAS.

Asher, Philip: An explanation of the chemistry of the U. S. P. assay for tartar emetic.—Am. J. Pharm. 1917, v. 89, p. 166.

Falconer, A. W. and Anderson, A. G.: A report on the use of tartar emetic in the treatment of malaria.—Lancet, 1917, v. 193, p. 743-745.

Neave, S.: A favorable report on the use of tartar emetic in the treatment of nine cases of cerebrospinal fever.—Lancet, 1917, v. 1, p. 219.

Rogers, Sir Leonard: A report on the intravenous use of tartar emetic in the treatment of malaria.—Brit. M. J. 1917, v. 1, p. 6.

ANTIPYRINA.

François, Maurice: A discussion of some of the methods for the quantitative determination of antipyrine, notably the method of the French Codex and that of Bougault.—J. pharm. et chim. 1917, v. 15, p. 97-105.

Bougault, J.: The author has slightly modified his original method for the estimation of antipyrine by its conversion into iodoantipyrine.—J. pharm. et chim. 1917, v. 15, p. 337-339.

Tunmann, O.: Reactions for the identification of antipyrine are described.—Apoth. Ztg. 1917, v. 32, No. 69, through Pharm. Zentralh. 1918, v. 59, p. 195-196.

Hankin, E. H.: Descriptions of tests for narcotic and anesthetic drugs include tests for the identification of antipyrine.—India J. Med. Res. 1916, v. 14, p. 237–255, through Chem. Abstr. 1917, v. 11, p. 524.

Gautier, Claude: A note on the color reaction produced by the addition of an alcoholic solution of p-dimethylaminobenzaldehyde to an aqueous solution of antipyrine. An orange color develops upon the addition of hydrochloric acid. Chloroform dissolves the pigment with a rose color and amyl alcohol with an orange-rose color. Compt. rend. soc. biol. 1917, v. 80, p. 672–673; J. pharm. et chim. 1917, v. 16, p. 189.

Fernan, A.: A method for the analysis of *Antipyrenum Coffeino-citricum* is based on the precipitation of the antipyrine with picric-acid solution.—Ztschr. allgem. österr. Apoth.-Ver. 1917, v. 55, p. 401.

Mannich, C.: Notes on the incompatibility of antipyrine with hexamethylenaminetetramine or formaldehyde preparations in the presence of acids.—Boll. chim.-farm. 1917, v. 56, p. 279.

Roberts, J. G.: One lot of antipyrine was rejected on account of having a melting point of 2° C. lower than the U. S. P. standard of 111° C. to 113° C.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 80.

Berezin, V. I.: In an investigation of the action of poisonous substances on the vessels of the brain, the effects of antipyrine were studied.—Russky Vratch, 1916, v. 15, p. 513 through J. Am. M. Assoc. 1917, v. 67, p. 844.

APOMORPHINAE HYDROCHLORIDUM.

Dohme, A. R. L.: Tests made with apomorphine hydrochloride show that it undergoes a slight color change on keeping, but that no noticeable change takes place if kept in amber-colored bottles wrapped in red paper. Information relative to the keeping qualities of apomorphine and apomorphine tablets is desired. Proc. Am. Drug Mfg. Assn. 1917, p. 183–184.

Palet, Luciano P. J.: A sensitive test for apomorphine consists in adding 1 to 2 drops of the alkaloid solution to 1 to 2 cubic centimeters of Guglialmelli's arseno-tungstic or arseno-tungsto-molybdic reagent, shaking the mixture 2 or 3 minutes, and then adding 5 to 10 cubic centimeters of a cold saturated solution of pure sodium carbonate. An indigo-blue color varying in intensity with the concentration is obtained. Anales soc. quím. Argentina. 1916, v. 4, p. 84–86.

AQUA.

Vila, A.: An illustrated description of an automatic apparatus for the preparation and storage of potable water at the front.—J. pharm. et chim. 1917, v. 15, p. 277-282.

Anon.: Data showing the composition and physical and chemical constants of mineral waters containing sulphur, iron, and arsenic are given.—Giorn. farm. chim. 1917, v. 66, p. 204–206.

Rosset, L.: From experiments it is concluded that the density of carbonated waters, as determined by the hydrometer, is valueless as an indication of the amount of CO_2 present.—Ann. falsif. 1917, v. 10, p. 457–458.

Barnard, H. E.: A discussion of modern methods of water purification by chemical treatment.—Am. Food J. 1917, v. 12, p. 447–448 and 570–571.

Massy: A discussion of the means of determining the quantity of solution of chlorinated potassa which is necessary for the purification of water.—J. pharm. et chim. 1917, v. 15, p. 209–213.

Scott, H. H., and Jameson, W. W.: A report of researches on the potability and germicidal effect of waters containing lime.—Lancet, 1917, v. 192, p. 1008.

Hasseltine, H. E.: An investigation of the Treasury Department standard for the bacteriological examination of water.—Public Health Reports, 1917, v. 32, p. 1879–1887.

Nelson, B. F.: A description of a direct microscopical method for the counting of bacteria in water.—J. Am. Chem. Soc. 1917, v. 39, p. 515.

Bado, Attilio, and Trelles, Rogelio: An investigation of methods for measuring the turbidity of water with a description of a new method.—Anales soc. quím. Argentina. 1916, v. 4, p. 284–291.

Kolthoff, I. M.: Remarks on the chemical analysis of drinking water.—Pharm. Weekblad. 1917, v. 54, p. 547–555, 612–618, 635–646, 882–884, 1095–1098, 1115–1124.

Winkler, L. W.: A fourth contribution to a series of articles on water analysis. —Ztschr. angew. Chem. 1917, v. 30, p. 113–116.

Zaillard: An outline of a scheme for the rapid analysis of water in the field. -Répert. pharm. 1917, v. 28, part 2, p. 134-140.

Martin, Felix: A description of a rapid systematic procedure for detecting the principal mineral and organic poisons in water.—J. pharm. et chim. 1917, v. 16, p. 205–210, 235–240.

Benoist, Marcel: A contribution on the toxicological analysis of drinking water in the field.—J. pharm. et chim. 1917, v. 15, p. 149–158.

Winkler, L. W.: Descriptions of methods for the determination of alkalinity, hardness, and heavy metals in water. —Ztschr. angew. Chem. 1916, v. 29, p. 218, through Chem. Abstr. 1917, v. 11, p. 1220.

Wagenaar, M.: A rapid method for the determination of the alkalinity of potable waters is described, and data obtained in the comparison of this method with that of Kolthoff, are presented.—Pharm. Weekblad, 1917, v. 54, p. 1454–1455.

Polinski, M.: A detailed description is given of a method for detecting and identifying small quantities of heavy metals in water. —Chem.-Analyst, 1917, v. 22, p. 24.

Meldrum, Robert: Data relative to the colorimetric ammonium sulphide test for zinc as applied to water are presented.—Chem. News, 1917, v. 116, p. 271–272. For a discussion of the colorimetric ferrocyanide process, see p. 295–296, 308–310.

Meaurio, Victor L.: Small amounts of vanadium may be detected in water by means of a reagent consisting of a 0.2 per cent aqueous solution of diphenylamine.—Anales soc. quim. Argentina, 1917, v. 5, p. 185–189.

LeRoy, G. A.: A description of a method for the detection of traces of free chlorine in water. The reagent employed is hexamethyltriparaminotriphenylmethane hydrochloride.—Ann. chim. analyt. 1917, v. 21, p. 240.

Winkler, L. W.: A method for the estimation of hydrogen sulphide in water is described. —Ztschr. angew. Chem. 1916, v. 29, p. 383–384, through Analyst, 1917, v. 42, p. 26.

Incze, G.: A method suitable for the estimation of hydrogen sulphide in water in the field is described.—Ztschr. analyt. Chem. 1917, v. 56, p. 308–310, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 502.

AQUA AMMONIÆ.

van der Haar, A. W.: In a report on the analyses of chemicals in Holland during the past few years, it is stated that ammonia water always contains lead.—Pharm. Weekblad, 1917, v. 54, p. 256.

Engfeldt, N. O.: A method for the detection of coal-tar products in ammonia water depends on the formation of a precipitate when

10 cubic centimeters of the latter is heated with 2 cubic centimeters of caustic soda solution and 5 cubic centimeters of iodine solution. An abstract.—Pharm. Weekblad, 1917, v. 54, p. 162.

Villiers, A.: A description of a method for the quantitative determination of ammonia and of hydrochloric acid by weighing as ammonium chloride.—Bull. soc. chim. France, 1917, v. 21, p. 406–408.

Christensen, F. W.: Seven samples of ammonia water examined were deficient in ammonia content.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 338.

AQUA AURANTII FLORUM.

Guyot, R.: The green color sometimes observed in samples of orange-flower water is due to an organism known as *Bacillus chlororaphis*. The green color develops only when the water is exposed to the air and light.—J. pharm. et chim. 1917, v. 15, p. 12–19.

AQUA AURANTII FLORUM FORTIOR.

Utech, P. Henry: If the stronger orange flower water be subjected to a freezing temperature, as frequently happens in winter during shipment, the characteristic odor is materially impaired.—Drug. Circ. 1917, v. 61, p. 398.

AQUA DESTILLATA.

Tribondeau, L.: Ordinary distilled water may be made suitable for microscopic work by adding silver carbonate or oxide and redistilling.—J. pharm. et chim. 1917, v. 15, p. 162.

AQUA HAMAMELIDIS.

Beringer, George M.: The directions for the preparation of hamamelis water were eliminated from the U. S. P., IX, because of the fact that the production of this water cannot be undertaken by the pharmacist, but can only be carried on as a commercial operation in favorable localities.—Am. J. Pharm. 1917, v. 89, p. 350.

Tice, William G.: Of 115 samples of hamamelis water examined, 9 were below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

AQUA ROSÆ FORTIOR.

Utech, P. Henry: If stronger rose water be subjected to a freezing temperature, as frequently happens in winter during shipment, the characteristic odor is materially impaired.—Drug. Circ. 1917, v. 61, p. 398.

ARGENTI NITRAS.

Steiger, O.: Three cases of universal argyria following the administration of 6.5 grams of silver nitrate during a period of 1 to 15 years are reported.—Correspondenz-Blatt f. Schweizer Aerzte, 1917, v. 47, p. 1192; through J. Am. M. Assoc. 1917, v. 69, p. 1650.

ARGENTUM (NONOFFICIAL COMPOUNDS).

Rebière, G.: The preparation and composition of the electrolytic colloids of silver.—Bull. Sc. pharmacol. 1917, v. 24, p. 193–204.

von Veimarn, P. P., Anosov, V. Ya., and Morozov, N. I.: A description of the methods of preparation and the properties of the dried water-soluble dispersoid silver used in medicine.—J. Russ. Phys. Chem. Soc. Proceed. 1916, v. 48, p. 198–199, through Chem. Abstr. 1917, v. 11, p. 3380.

Dresser, H.: A note calls attention to the variation in the quantity of water-soluble material in the commercial samples of colloidal silver.—Ztschr. exper. Path. u. Therap. 1917, v. 19, p. 285–298, through Chem. Zentralbl. 1918, v. 89, part 1, p. 941.

Gutbier, A., and Krätle, N.: Researches on colloidal silver prepared by the action of $Na_2S_2O_4$ on silver solutions in the presence of the extract of *Tubera salep*.—Kolloid.-Ztschr. 1917, v. 20, p. 83–101, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 244.

Gutbier, A., and Wagner, A.: Experiments in the preparation of a colloidal silver solution by the action of hydrazine hydrate on silver nitrate in aqueous solution containing 0.2 per cent of quince-seed extract.—Kolloid.-Ztschr. 1916, v. 19, p. 280-287, through Chem. Abstr. 1917, v. 11, p. 905.

Farbw. vorm. M. L. & B.: German patent No. 292,517 describes a method for the preparation of albumin silver glycocholate, and albumin derivative silver glycocholate compounds.—Chem. Abstr. 1917, v. 11, p. 1884.

Pauli, Wolfgang, and Matula, Johann: An investigation of the combination of proteins with silver by the electrometric measurement of the changes of the silver concentration and by the measurement of the electrical conductivity when proteins are added to silver salts.—Biochem. Ztschr. 1917, v. 80, p. 187-210, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 419–420.

Hussy, P., and Hartmann, M.: U. S. patent No. 1,227,624 describes the preparation of silver compounds of acridine dyes suitable for use as antiseptics.—Chem. Abstr. 1917, v. 11, p. 2248.

Gerasimov, A. F.: A method for the preparation of collargol is described in detail.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 87–90, 251–253, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 98.

Terry, Robert W.: Trituration with glycerol previous to the addition of water is recommended as a means of facilitating the preparation of solutions of protargol.—Midl. Drug. 1917, v. 51, p. 419–420.

Lucas, H. J., and Kemp, A. R.: A discussion of the cyanide-sulphide method for determining silver in organic compounds. Several type analyses are given.—J. Am. Chem. Soc. 1917, v. 39, p. 2074–2078.

Marshall, C. R., and Killoh, G. B.: A report of experiments to determine the bactericidal action of collosols of silver and mercury.—Brit. M. J., 1917, v. 1, p. 102–104.

Rae, A. L.: A report on the value of colloidal silver in the treatment of eye diseases and injuries.—Brit. M. J. 1917, v. 1, p. 104.

Olson, George M.: A report of a case of argyria localis due to the use of organic silver preparations.—J. Am. M. Assoc. 1917, v. 69, p. 87–90.

ARNICA.

Alsberg, C. L.: Examination by the Bureau of Chemistry of samples of imported "arnica flowers" has disclosed that *Inula britannica* L. has been substituted in some instances for *Arnica montana* L. The differences in the characteristics of the two are enumerated.—S. R. A.—Chem. 1917, No. 20, p. 57.

Roberts, J. G.: A shipment represented to be arnica flowers proved to be inula flowers.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 80.

Wolcott, R. C.: A discussion of the physiological action of arnica.—J. Am. Inst. Homoeop. 1917, v. 9, p. 900–904.

ARSENI IODIDUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not arsenic iodide tablets deteriorate.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

ARSENIC (NONOFFICIAL COMPOUNDS).

Werner, Louis F.: A short article on the composition of some of the new organo-metallic compounds, especially those containing members of the arsenic group or mercury.—J. Am. Pharm. Assoc. 1917, v. 6, p. 24–26.

Anon.: Descriptions of a number of salvarsan and neosalvarsan substitutes, including *kharsivan* (British), *diarsenol* (Canada), *arsenobenzol* (French), *neokharsivan* (British), *novarsenobenzol* (French), *galyl* (French), and *intramine* (British).—Am. Druggist, 1917, v. 65, No. 1, p. 32.

Anon.: The health department of the city of New York has addressed a communication to the drug trade warning dealers of the enormous increase in the supply of spurious and adulterated salvarsan and neosalvarsan now being offered for sale throughout the country.—Oil, Paint & Drug Rep. 1917, v. 91, No. 12, p. 11.

Gautier, A.: Observations on the activation of the curative properties of quinine and mercury by organometallic arsenic compounds.—Compt. rend. acad. sc. 1917, v. 164, p. 648–650.

Anon.: The Lancet of February 17 gives a digest of the reports of military consultants in France as to the treatment of syphilis by neosalvarsan and similar compounds during the two years ending August, 1916. The number of medical officers giving injections was 185, and the total number of injections given was 94,762, of which all but 1,537 were for syphilis. The preparations used were neosalvarsan, novarsenobenzol, salvarsan and arsenobenzol, galyl, and luargol. No fatal case was reported among the 95,000 injections, although in some cases toxic symptoms were observed. -Pharm. J. 1917, v. 98, p. 176.

Lockenmann, Gorg: A report of investigations on the excretion of arsenic in the human urine after injection of different preparations (arsacetin, atoxyl, arsenophenylglycine, salvarsan, and neosalvarsan).—Biochem. Ztschr. 1916, v. 78, p. 1-36, through J. Chem. Soc. Lond., 1917, v. 112, part 1, p. 495.

Sieburg, Ernst: A study of the fate of arsenic compounds in the body.—Ztschr. physiol. Chem. 1916, v. 97, p. 53–108 through Zentralb. Biochem. u. Biophys. 1917, v. 19, p. 157–160.

Ormsby, Oliver S.: A discussion of the use of salvarsan and neosalvarsan in the treatment of syphilis. —J. Am. M. Assoc. 1917, v. 68, p. 949–954.

Danysz, J.: The physicochemical properties of the compounds of the arsenobenzene groups. I. A study of the transformation of these compounds in the organism.—Ann. inst. Pasteur, 1917, v. 31, p. 114–137.

Danysz, J.: From experiments with rabbits it is concluded that the injection of luargol is followed by the production of an antibody. In the author's opinion there is a complete identity of the reactions between the serums and arsenobenzenes, and between the serums and biologic antigens.—Compt. rend. Acad. sc. 1917, v. 164, p. 746–748.

Dalimier, R.: Notes on the use of luargol in therapeutics.—Ann. inst. Pasteur, 1917, v. 31, p. 492–516.

Yakinoff, W. L., and Wassilevsky, W. J.: A report of some biological tests with luargol. Results obtained in the treatment of experimental dourine in mice are reported.—Compt. rend. soc. biol. 1917, v. 80, p. 387–388.

Anon.: Since quite a number of cases of salvarsan poisoning, resulting in partial paralysis, blindness, and even death, have occurred in the clinics of several large universities in Germany, the Reichbote believes that statistical data concerning all cases of poisoning by this drug occurring in the Empire should be published by the Government in order to warn against the indiscriminate use of the remedy.—Drug. Circ. 1917, v. 61, p. 244.

Pearce, Louise, and Brown, Wade H.: An investigation of the toxicity of salvarsan and neosalvarsan. The toxicity of both substances was found to be quite irregular, the greater irregularities being observed with neosalvarsan.—J. Pharmacol. 1917, v. 9, p. 354–355.

McCaskey, G. W.: A report of a fatal case of salvarsan and neosalvarsan myelitis.—J. Am. M. Assoc. 1917, v. 69, p. 1960–1962.

Armsby and Mitchell: A report on the toxicity of the present supply of salvarsan and neosalvarsan. Recent shipments were found to be more toxic than the stocks on hand.—West Virginia M. J. Jan. 1917 through Therap. Gaz. 1917, v. 41, p. 437.

Arsphenamine.—Editorial. Hereafter salvarsan will be manufactured in this country under the name of arsphenamine. It will be prepared according to German patents by three manufacturers in the United States, namely, the Dermatological Research Laboratories, of Philadelphia, the Takamine Laboratory (Inc.), of New York, and the Farbwerke-Hoechst Co. (Herman A. Metz Laboratory), of New York.—Am. Druggist, 1917, v. 65, No. 12, p. 22.

Anon.: A report of the hearing which the Committee on Patents of the United States Senate gave on June 1 on the several bills now pending in Congress, looking toward the abrogation or suspension of of the patents controlling the manufacture of salvarsan, or the assumption of ownership or trusteeship by the Government.—J. Am. M. Assn. 1917, v. 68, p. 1706-1707.

Anon.: The rector of a German university recently stated that while the cost of manufacturing a kilogram of salvarsan did not exceed 8 marks, or about $2, the drug was sold at 16,000 marks ($3,808).—Chem. Eng. 1917, v. 25, p. 145.

Rules and standards prescribed by the United States Public Health Service for the manufacture of arsphenamine.—Public Health Rep. 1917, v. 32, p. 2071-2072.

Burch, J. L.: Short descriptions of salvarsan and its substitutes are given.—Practitioner, 1917, v. 98, p. 279-286.

Anon.: At the annual meeting of the National Academy of Sciences Dr. Simon Flexner, of the Rockefeller Institute, announced that two American physicians (Drs. Jacobs and Heidelberger, of the Rockefeller Institute) have evolved a new remedy to replace salvarsan. The new discovery is an arsenic compound and is called "A 189."—Oil, Paint & Drug Rep. 1917, v. 92, No. 23, p. 21.

Dohi, K., et al.: A comparison of Japanese salvarsan preparations with the original product of Ehrlich. The toxicity of all preparations was notably less than that of the German product.—Chem. Abstr. 1917, v. 11, p. 2934.

Hunter: From experiments it is concluded that arsaminol should be just as effective as salvarsan, but that further observations will be necessary to establish its limits of toxicity. Arsaminol was found to be less soluble than salvarsan.—Chem. Abstr. 1917, v. 11, p. 2370.

Ivanov, V. V.: Experiments with the Russian preparation made by Andrey and Kozlov and named arsenol, and another preparation made by Schereschefsky and called benarsan, proved that they are identical with the Ehrlich's drug.—Russki Vratch, 1916, p. 1085 through Chem. Abstr. 1917, v. 11, p. 866.

Anon.: A note calls attention to the adulteration of salvarsan in Sweden. One of the samples obtained in Stockholm was found to consist of a mixture of barium chromate, barium sulphate, and potassium sulphate. A second sample examined consisted of lycopodium, sodium chloride, and ocher. Schweiz. Apoth.-Ztg. 1917, v. 55, p. 239.

Lissauer, Max: Some notes on death due to salvarsan.—Deutsch. med. Wchnschr. 1917, v. 43, p. 1471–1472.

Lowrey, Lawson G.: A report of a case of pernicious anemia in a syphilitic treated with salvarsan.—Boston M. & S. J. 1917, v. 177, p. 52–53.

Vassallo: Two cases of sudden death after the administration of kharsivan are reported. An abstract.—Therap. Gaz. 1917, v. 41, p. 743.

Wadia, Manneck D.: A report of a case of death after the administration of salvarsan. Brit. M. J. 1917, v. 1, p. 13–14.

Cazamian: A report of a case of icterus of hepatic origin due to salvarsan.—Arch. med. et pharm. nav. 1917, v. 103, p. 46–62.

Rowlands, M.. J. An illustrated description of an apparatus for the intravenous injection of salvarsan.—Practitioner, 1917, v. 99, p. 199–200.

Stoner, Willard C.: A clinical report on the intraspinal treatment of neurosyphilis with standardized salvarsanized serum.—J. Am. M. Assoc. 1917, v. 68, p. 610–611.

Jones, Lloyd, and Gibson, A. J.: A report of 200 cases of syphilis treated with salvarsan. Brit. M. J. 1917, v. 1, p. 152–154.

Neoarsphenamine.—Harrison, L. W. et al: A report on the treatment of syphilis by intramuscular or subcutaneous injection of neosalvarsan.—Brit. M. J. 1917, v. 1, p. 569–571.

Balzer, F., and Beauxais-Lagrave, R.: A method for the preparation of a glucose solution of novarsenobenzol suitable for intramuscular injections.—L'Union pharm. 1917, v. 58, p. 177, through Year-Book of Pharmacy, 1917, p. 259.

Zeisler, E. P.: A report of 10 cases in which bad effects followed the administration of neodiarsenol.—J. Am. M. Assoc. 1917, v. 69, p. 2181.

Shields, C. L.: Out of 23 patients injected with neoarsphenamine, four exhibited severe symptoms of poisoning and one died. The observance of toxic symptoms by other physicians is also reported.—J. Am. M. Assoc. 1917, v. 68, p. 53.

ARSENI TRIOXIDUM.

Asher, Philip: An explanation of the chemistry of the U. S. P. assay for arsenic trioxide.—Am. J. Pharm. 1917, v. 89, p. 166.

McNally, William D.: Data showing the equivalents in grams of arsenic trioxide found per 100 grams of tissue of the various organs nine days after death.—J. Am. Chem. Soc. 1917, v. 39, p. 826–828.

Schreinemakers, F. A. H., and DeBaat, Mej. W. C.: A discussion of experiments on the combination of arsenious acid anhydride with various salts. Data bearing on the combinations formed are presented.—Chem. Weekblad, 1917, v. 14, p. 141–146, 203–208, 244–248.

Roberts, J. G.: One lot of arsenic trioxide examined was of decidedly inferior quality. It was only 98.14 per cent pure, and failed to give satisfactory results with the U. S. P. ammonia-water test, the ammonium sulphide test, the antimony-tin-cadmium test, and yielded 1 per cent of residue after sublimation.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 80.

Davis, Benjamin F.: A report of two cases of perforation of the nasal septum due to the inhalation of arsenic trioxide.—J. Am. M. 1917, v. 68, p. 1620–1621.

ASAFŒTIDA.

Rusby, H. H.: Asafetida is now almost always of good quality. The standards which were worked out by the United States Bureau of Chemistry, and which were submitted to so much criticism by certain English chemists, have been fully justified.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

Merrill, E. C.: Referee report on the analysis of asafetida. Qualitative tests are described and data obtained in the application of these tests and in the determination of the lead number are presented.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 82-87.

Dohme, A. R. L.: The quality of asafetida, especially as to ash content, was better than in former years.—Proc. N. W. D. A. 1917, p. 507.

Ewe, G. E.: All lots of asafetida examined during the past year were satisfactory in alcohol-soluble matter content.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 81.

Patch, E. L.: A sample of powdered asafetida yielded 54.5 per cent of alcohol-soluble constituents and 20 per cent of ash.—J. Am. Pharm. Assoc., 1917, v. 6, p. 310.

Scoville, W. L.: Eleven samples of asafetida ranged from 52.70 per cent soluble in alcohol and 37.40 per cent of ash to 76.4 per cent soluble in alcohol and 6.6 per cent of ash. Eight samples contained more than 50 per cent of material soluble in alcohol, and, with one exception, less than 8 per cent of ash.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Roberts, J. G.: Of eight lots of asafetida examined, six were adulterated.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 80.

Sayre et al. One of two samples of asafetida tested was adulterated.—Rep. Kansas Bd. Health, 1917, v. 13, p. 173.

ASARUM, N. F.

Farwell, Oliver Atkins: "Snakeroot" is the most generally accepted way of writing the word "snake-root," appearing in the N. F., IV.—Drug. Circ. 1917, v. 61, p. 229.

ASPIDIUM.

Farwell, Oliver Atkins: The oldest post-Linnæan generic name for the male fern is *Filix* (Fuchs) Hill. The proper combinations for the species designated are, therefore, *Filix Filix-mas* (Lin.) Farwell and *Filix marginalis* (Lin.) Farwell. -Drug. Circ. 1917, v. 61, p. 173.

Dohme, A. R. L.: There is very little of the official *Aspidium Filix-mas* gathered in this country. The material is of a different species, and is generally unpeeled, and therefore in such a condition that it can not be used.—Proc. N. W. D. A. 1917, p. 513.

Anon.: A book review calls attention to a reprint from the Eighteenth Annual Report of the Michigan Academy of Science, December, 1916, entitled *Fern Notes*.—Pharm. Era, 1917, v. 50, p. 124.

ASPIDOSPERMA.

Farwell, Oliver Atkins: The hyphen between *Quebracho* and *blanco* has been omitted in the U. S. P., IX. This is doubtless a typographical error.—Drug. Circ. 1917, v. 61, p. 174.

Rippetoe, J. R.: An alkaloidal standard should be established for aspidosperma and its fluid extract. A good quality of drug should contain at least 1 per cent of chloroform-soluble alkaloids when assayed by the method for cinchona.—Drug. Circ. 1917, v. 61, p. 501. See also J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

Dohme, A. R. L.: One sample of quebracho examined was composed entirely of wood.—Proc. N. W. D. A. 1917, p. 520.

Anon.: The alkaloidal content of 1 sample of quebracho assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

ATROPINA.

Arny, L. W.: A report on the value of selecting belladonna plants as a factor for increasing the atropine content. The external characters of the plant appear to be an index of alkaloidal content.—Am. J. Pharm. 1917, v. 89, p. 254–257.

Von Weisse, G. and Meyer, Levy: The ionization constant of atropine calculated from the neutralization and displacement curves is 1.7 x 10–12.—J. chim. phys. 1916, v. 14, p. 261–284.

Rasmussen, H. B.: A description of an exact method for the quantitative determination of atropine. The alkaloid is precipitated by means of silicotungstic acid.—Arch. Pharm. Chem. 1917, v. 24, p. 83–86, 110–113; Pharm. Weekblad, 1917, v. 54, p. 1458–1459.

Bellows, Howard P.: A study of atropine with particular reference to the proving of alkaloids.—J. Am. Inst. Homoeop. 1917, v. 9, p. 408–414.

AURANTII AMARI CORTEX.

Farwell, Oliver Atkins: Why any varietal or subspecific name should be used in describing bitter orange is a question that has not been explained. The bitter orange (*Citrus vulgaris* Risso, *Citrus Bigaradia* Loisel, and *Citrus Aurantium amara*) is the exact type of the Linnean *Citrus Aurantium*. No further designation is necessary.—Drug. Circ. 1917, v. 61, p. 173.

AURANTII DULCIS CORTEX.

Farwell, Oliver Atkins: It is suggested that it would be better to consider the sweet orange mentioned in the U. S. P. as a distinct species under the name *Citrus Sinensis* (Linn.) Osbeck.—Drug. Circ. 1917, v. 61, p. 174.

BALSAMUM PERUVIANUM.

Rippetoe, J. R.: In the U. S. P. assay for cinnamein it is directed that the residue be dried to constant weight at 100° C. This can not be done, since its boiling point is between 225° and 235° C. The ether should be allowed to evaporate at room temperature or gentle heat, and the residue dried in a vacuum desiccator over sulphuric acid.—Drug. Circ. 1917, v. 61, p. 501; J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

BALSAMUM TOLUTANUM.

Patch, E. L.: One sample of balsam of Tolu examined contained 9.8 per cent of inert material insoluble in alcohol and an excess of moisture.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

BELLADONNÆ FOLIA.

Arny, L. Wayne: Observations on the breeding of belladonna to increase the alkaloidal content.—Mulford's Vet. Bull. 1917, v. 8, p. 67–70; Am. J. Pharm. 1917, v. 89, p. 254–257.

Sievers, A. F.: A report of experiments in the selection of belladonna seeds with special reference to the power of germination.—Am. J. Pharm. 1917, v. 89, p. 203–213.

Schneider, Albert: A comprehensive report on the cultivation of belladonna in California.—Pacific Pharm. 1917, v. 11, p. 161–165, 187–192.

Tunmann, O.: A note on some new adulterants of belladonna leaves. Phytolacca, ailanthus, and plantago are mentioned.—Apoth.-Ztg. 1917, p. 131, through Pharm. Weekblad. 1917, v. 54, p. 1447.

Alsberg, C. L.: Examination of samples of importations of "belladonna leaves" by the Bureau of Chemistry has revealed that Solanum *nigrum* L. has been substituted in some instances for the true material.—S. R. A.-Chem. 1917, No. 20, p. 58.

Dohme, A. R. L.: The roots and foliage of the common nightshade, *Solanum nigrum* Lin., are being largely gathered and offered for belladonna. This plant contains solanine.—Proc. N. W. D. A. 1917, p. 511.

Dohme, A. R. L.: All samples of belladonna leaves examined were of first-class quality. Domestic leaves were superior to the imported and some assayed as high as 0.7 per cent of total alkaloids.—Proc. N. W. D. A. 1917, p. 507.

Engelhardt, H.: One of the 12 samples of belladonna leaves examined met the requirements of the U. S. P. The alkaloidal content ranged from 0.3 to 1.0 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Patch, E. L.: Five samples of belladonna leaves assayed 0.37, 0.46, 0.28, 0.238, and 0.35 per cent, respectively, of total alkaloids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Roberts, J. G.: Eight lots of belladonna leaves examined were of U. S. P. quality and contained total alkaloids ranging from 0.41 per cent to 0.67 per cent. Two samples of domestic, cultivated leaves examined were in good condition.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 81.

Scoville, W. L.: Six lots of belladonna leaves examined assayed from 0.30 to 0.52 per cent of alkaloids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Dohme, A. R. L.: Five samples of belladonna leaves, native stock, examined yielded 0.55 per cent, 0.63 per cent, 0.425 per cent, 0.32 per cent, and 0.62 per cent of mydriatic alkaloids, respectively.—Proc. N. W. D. A. 1917, p. 509.

Anon.: Of nine samples of belladonna leaves assayed, the mydriatic alkaloidal content of eight was above standard and one below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

BELLADONNÆ RADIX.

Holmes, E. M.: Notes on commercial belladonna obtained from India. The appearance of the root is somewhat different from that of *Atropa Belladonna*, and the character of its alkaloids should be determined before it is accepted as a substitute for the official product.—Pharm. J. 1917, v. 98, p. 351.

Eder, R.: The author describes the methods which he used in distinguishing belladonna from helenium root in a forensic case.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 132–133.

Dohme, A. R. L. The quality of all 15 shipments of belladonna root examined met the U. S. P. standard.—Proc. N. W. D. A. 1917, p. 507.

Engelhardt, H.: Four samples of belladonna root were rejected for being low in alkaloidal content. They assayed from 0.3 to 0.345 per cent of total alkaloids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Roberts, J. G.: One sample of domestic, cultivated belladonna root examined yielded 0.52 per cent of total alkaloids. It was composed of clean, dry root, both split and whole.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 81.

Anon.: Of seven samples of belladonna root assayed, the mydriatic alkaloidal content of five was above standard and two below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

BENZALDEHYDUM.

Anon.: A description of a method for preparing benzaldehyde from toluene.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 153–154.

Anon.: An article of a general nature dealing with the manufacture of benzaldehyde.—Chem. Trade J. 1917, v. 61, p. 461, through Chem. Abstr. 1918, v. 12, p. 475.

Salamon, M. S.: A description of a method for the estimation of chlorine in synthetic benzaldehyde based on that of Vaubel is described.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 41–42.

BENZINUM PURIFICATUM.

J. G. P.: A review of a volume by N. Strache on the production, properties, and storage of benzine.—Chem. Weekblad, 1917, v. 14, p. 77.

Rittman et al.: The physical and chemical properties of gasolines sold throughout the United States during 1915.—Bur. Mines Tech. Paper, 1916, No. 163, p. 1–45.

Dean, E. W., and Hill, H. H.: An investigation of the Hanus iodine method, the sulphuric acid absorption method, the acid heat test, and the bromine absorption method for the determination of unsaturated hydrocarbons in gasoline.—Bur. Mines Tech. Papers, 1917, No. 181, p. 3–22.

Formanek, Jaroslav, et al.: Various tests for the purity of petroleum ether are described. Among them are tests for benzene and turpentine.—Chem. Ztg. 1917, v. 41, p. 713–714 and 730–731 through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 581.

Coste, J. H.: An investigation of the inflammability of petroleum spirit at low temperatures.—Analyst, 1917, v. 42, p. 168–170.

Böhme, A., and Kriete: A report of clinical and experimental observations on benzine poisoning.—Arch. exper. Path. u. Pharmakol. 1917, v. 81, p. 1–14.

BENZENE (NONOFFICIAL).

Grunmach, L.: The surface tension of benzene by the capillary wave method was found to be [illegible] dynes/cm., and by the use of the author's capillary plate apparatus 28.3 dynes/cm.—Beibl. Ann. Physik. 1916, v. 40, p. 261–262, through Chem. Abstr. 1917, v. 11, p. 1066.

Wilson, J. A.: British patent No. 14152. A method for removing carbon disulphide from benzene by means of sodium or potassium hydroxides is described.—Chem. Abstr. 1917, v. 11, p. 703.

Weiss, J. M.: U. S. patent No. 1205962 describes the purification of benzene by mixing with an aqueous solution of copper sulphate (1–3 pounds of copper sulphate to 100 gallons of hydrocarbon) and distilling.—Chem. Abstr. 1917, v. 11, p. 300.

Moss and Simon Carves By-Product Coke Oven Construction and Working Co.: British patent No. 10066 describes the purification of benzene by passing the vapors through sulphuric acid and subsequently through caustic alkali solution. Chem. Abstr. 1917, v. 11, p. 95.

Schmitz, E.: A detailed description of a method for the detection of benzene in forensic analyses.—Pharm. Weekblad, 1917, v. 54. p. 1316.

Simonds, J. P., and Jones, H. M.: A study of the effect of intravenous injections of benzene upon the production of antibodies.—J. Med. Res. 1915, v. 33, p. 197–211.

Winslow, F. S., and Edwards, W. D.: Notes on a case of leukemia with some observations on the administration and dosage of benzene.—Presse méd. 1917, v. 25, p. 153; J. Am. M. Assoc. 1917, v. 68, p. 1511.

BENZOINUM.

Coffignier, Ch.: Quantitative analytical data relative to the constituents of benzoin are given.—Rev. chim. industrielle, 1917, v. 26, p. 177.

Roberts, J. G.: Four samples of benzoin (Sumatra) examined under the U. S. P., IX, requirements contained 69.52, 76.23, 76.94, and 75.06 per cent, respectively, of alcohol-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

BENZOSULPHINIDUM.

Beyer, Oskar: A review of the chemistry and physiology of saccharin and disaccharin. Helvetica Chim. Acta. 1917, v. 1, p. 67–71.

Raimon, Marcel: A discussion of methods which may be employed for the production of saccharin on a commercial scale. The properties, methods of purification, and physiological action of saccharin are also discussed.—Giorn. farm. chim. 1917, v. 66, p. 5–13.

Helch, Hans: A comparison of the sweetening power of saccharin and sugar solutions. The syrup equivalents of different concentrations of saccharin are given. Schweiz. Apoth. Ztg. 1917, v. 55, p. 239.

Merl, Th., and Lüft, K.: A description of a method for the determination of sulphur in saccharin. The compound is oxidized with a 15 per cent solution of hydrogen dioxide in the presence of a catalyzing agent. Ztschr. Unters. Nahr. u. Genussm. 1917, v. 33, p. 384 through Pharm. Weekblad, 1917, v. 54, p. 1287–1288.

Rosetto, Ernesto: A review of colorimetric and other methods for the determination of saccharin in syrups and other medicinal preparations. Rev. Farm. 1917, v. 60, p. 407–419.

Klostermann, M., and Scholta, K.: Descriptions of methods for the detection of saccharin. Ztschr. Unters. Nahr. u. Genussm. 1916, p. 67 through Pharm. Weekblad, 1917, v. 54, p. 305–307.

Bonis, A.: Descriptions of practical methods for the detection and estimation of saccharin in foodstuffs. Ann. Falsif. 1917, v. 10, p. 210–218.

Gloor, F.: One lot of saccharin examined was found to be the sodium salt of saccharin. Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

Burge, W. E.: A note on the food value of saccharin and its use as a substitute for sugar. Science, 1917, v. 48, p. 549–550.

BETANAPHTHOL.

Stortenbeker, W.: A report of investigations to determine the crystalline form of the two naphthols. Ztschr. Kryst. Min. 1916, v. 55, p. 373–374 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 557.

Katayama and Ikeda: Betanaphthol is identified by the appearance of a violet color when several drops of concentrated sulphuric acid and a drop of 0.01 per cent sodium nitrate solution are added to a dilute solution containing this compound. Giorn. farm. chim. 1916, v. 65, p. 225.

Denigès, G.: A description of a method for distinguishing between the two naphthols. An intense green coloration is obtained when a small quantity of α naphthol is mixed with a solution of titanic acid in concentrated sulphuric acid, whereas β naphthol gives a blood red coloration with this reagent. Ann. chim. analyt. 1916, v. 21, p. 216–217.

Guglialmelli, Luis: α naphthol may be distinguished from β naphthol by means of sodium arsenotungstate. α naphthol gives an intense blue coloration with this reagent, while β naphthol does not produce a color change. Anal. soc. quim. Argentina, 1917, v. 5, p. 97–101; also J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 547.

Ewe, G. E.: One lot of betanaphthol examined was dark in color, due to tarry matter, and was, therefore, not completely soluble in ammonia water. Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

BISMUTHI SUBNITRAS.

Luce, E.: A description of a method for the determination of nitric acid in bismuth subnitrate. The method is a modification of that of Debourdeaux. Bull. soc. chim. France 1917, v. 21, p. 264–271.

Tice, William G.: One sample of bismuth subnitrate examined was below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

Anon.: A note calls attention to the incompatibility of bismuth subnitrate with sodium hypophosphite if dispensed in powder papers which do not exclude moisture.—Rev. Farm. 1917, v. 60, p. 438.

Phillips, J.: A report of three cases of bismuth poisoning due to the administration of bismuth subnitrate in various forms.—Cleveland Med. J. 1917, v. 16, p. 419.

Editorial: A short article discussing poisoning by bismuth salts.—Lancet, 1917, v. 193, p. 249.

BROMUM, N. F.

Anon.: The output of bromine in the United States during 1915 amounted to 855,857 pounds. Chem. & Drug. 1917, v. 89, p. 497.

Reiman, Clarence K.: A revision of the atomic weight of bromine based on the normal density of hydrobromic acid gas. The value found was 79.924. J. chim. phys. 1917, v. 15, p. 334–359. See also Wallace J. Murray, ibid. p. 293–333.

Winkler, L. W.: In an article on the iodine content of Stassfurt sylvite and carnallite, a method for the detection of iodine in crude bromine is described.–Ztschr. angew. Chem. 1916, v. 29, part 1, p. 342–343.

Denigès, G., and Chelle, L.: A description of a modification of the technique for the detection and quantitative estimation of bromine ionized by fuchsine-sulphuric acid reagent.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 75–77.

Pellegrini, Rinaldo: In a note on death by asphyxia from deleterious gases, it is stated that prolonged inhalation of bromine vapor produces marked physiological alterations in the thyroid.—Arch. farm. sper. 1917, v. 23, p. 201–205.

Prins, H. J.: First aid for laboratory injuries. For bromine and chlorine vapors, inhale a mixture of ethyl alcohol and turpentine. For bromine burns, wash with a mixture of 1 vol. 25 per cent ammonia water, 1 vol. turpentine, and 10 vols. of 96 per cent alcohol.—Chem. Weekblad, 1917, v. 14, p. 646–647.

BUCHU.

Alsberg, C. L.: The Bureau of Chemistry calls attention to the fact that samples labeled "long," "short," and "oval" buchu leaves have been found to consist of unofficial species in some instances. The "long buchu" proved to be *Empleurum serratulatum* Sol. et Ait.; the "short buchu" was identified as *Barosma pulchellum* Bartling and Wendland; and the "oval buchu" was identified as *Barosma crenulata* Hook. var. *latifolia*.—S. R. A.–Chem. 1917, No. 20, p. 58.

CACAO PRÆPARATA.

Hanausek, T. F.: Notes on the microscopical detection of shells in powdered cocoa.—Pharm. Post, 1917, v. 50, p. 469–470.

Hess, H.: A description of the Congo red-brilliant blue method for the microscopical detection of cacao shells. The method is based on the recognition of the mucilage cells under the microscope by means of the stain mentioned.—Ztschr. Unters. Nahr. u. Genussm. 1916, v. 32, p. 404–407.

Beythien, A., and Pannwitz, P.: A comprehensive review of the methods employed for the detection of cacao shells in cacao products.—Ztschr. Unters. Nahr. u. Genussm. 1916, v. 31, p. 265–281.

Rocques, X.: Notes on the determination of the alkalinity of different brands of cacao, and on the analyses of the alkaline reacting substances present.—Ann. Chim. analyt. 1917, v. 22, p. 201–204.

Arpin: A report of investigations to determine the alkalinity of cocoa.—Ann. falsif. 1917, v. 10, p. 10.

Keller: A report of investigations to determine the fat in cocoa.—Apoth. Ztg. 1916, v. 31, p. 440, through J. Soc. Chem. Ind. 1917, v. 35, p. 98.

Débourdeaux, Léon: A description of a method for the quantitative determination of theobromine in cacao.—J. pharm. et chim. 1917, v. 15, p. 306–311.

CACTUS GRANDIFLORUS, N. F.

Farwell, Oliver Atkins: The proper botanical name for night-blooming cereus is *Selenicereus grandiflorus* (L.) Britton and Rose. The names given in the N. F., IV, are only synonyms and should not be used.—Drug. Circ. 1917, v. 61, p. 229.

CAFFEINA.

Bartlett, J. M.: In view of the results obtained by the collaborators in the determination of caffeine in tea and coffee, the referee for 1915 recommended that a modified Stahlschmidt method be provisionally adopted by the Association of Official Agricultural Chemists.—J. Assoc. Off. Agric. Chem. 1917, v. 3, p. 33–38.

Fabre, L. F. J.: The earlier analyses of maté by Stenhouse are criticised, as the caffeine content was reported as being only 0.13 per cent. The author finds the figure to be nearer 1.2 per cent.—Anales soc. quim. Argentina, 1917, v. 5, p. 92.

Emery, W. O.: A method for the estimation of caffeine, acetanilid, and codeine sulphate in mixtures containing the three substances is described.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 72–73.

Emery, W. O.: A description of a method for the estimation of caffeine, acetanilid, quinine, and morphine in mixtures containing these substances.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 73–74.

Means, J. H., et al.: Data relative to the effect of caffeine on heat production are presented. -Arch. Intern. Med. 1917, v. 19, p. 832–839.

Mendel, L. B., and Wardell, E. L.: A study of the effect of ingestion of coffee, tea, and caffeine on the excretion of uric acid in man.—J. Am. M. Assoc. 1917, v. 68, p. 1805–1807.

Hyde, I. H.: A study of the effects of caffeine on work in an athlete and a nonathlete. Small doses increased the power to do work in both subjects. A dose of 3.58 grains depressed the muscular power for work.—Am. J. Physiol. 1917, v. 43, p. 391–394.

Schultz, Hugo: An investigation of the influence of alcohol and caffeine-containing foods upon the red and green color sense. Arch. ges. Physiol. 1917, v. 166, p. 217 239, through Physiol. Abstr. 1917, v. 2, p. 232.

CALCII CARBONAS PRÆCIPITATUS.

Statham, N.: British patent No. 102928. Light calcium carbonate is prepared by spraying milk of lime through an atmosphere of CO_2.—Chem. Abstr. 1917, v. 11, p. 1026.

Montgomery, E. T., and Groves, M. M.: Data relative to the dissociation of calcium carbonate by heat are presented. -Trans. Ceram. Soc. 1916, v. 18, p. 214–222, through Chem. Abstr. 1917, v. 11, p. 291.

Berthelot, A.: A discussion of the use of calcium carbonate in therapeutics. The physical properties of calcium carbonate precipitated under different conditions are discussed with reference to their therapeutic properties. J. pharm. et chim. 1917, v. 16, p. 57-58.

Roberts, J. G.: In each of two samples of precipitated calcium carbonate examined, a slight excess of water soluble impurities was found. The samples were considered to be of normal quality, as this is usually the case.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

CALCII CHLORIDUM.

Rordorf, Helene: The preparation of pure calcium chloride from calcium carbonate and hydrochloric acid is described.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 239–240.

McPherson, A. T.: Data relative to the value of granular calcium chloride as a drying agent are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 1217–1219.

Bagster, Lancelot S.: A study of the composition of certain compounds of calcium chloride and acetone.—J. Chem. Soc. Lond. 1917, v. 111, p. 494–497.

CALCII GLYCEROPHOSPHAS.

Couch, James F.: An account of experiments designed to furnish knowledge of the behavior of calcium glycerophosphate in solution, and the effect upon the salt of those substances which are commonly associated with it in pharmaceutical mixtures.—Am. J. Pharm. 1917, v. 89, p. 245–251.

Dohme, A. R. L. The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not citric acid should be used in calcium glycerophosphate, as about 5 per cent of this materially increases its solubility.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

CALCII PHOSPHAS PRÆCIPITATUS, N. F.

Ramsay, A. A. An investigation of the solubility of calcium phosphate in citric acid. The substances sold as "phosphate of lime" and "Calcii Phosphas B. P." are not pure $Ca_3(PO_4)_2$, but are mixtures of di- and tricalcic phosphates.—J. Agric. Sci. 1917, v. 8, p. 277–298.

Chirikov, F. V., and Khaydin, N. V. A study of the action of 2 per cent acetic acid on calcium phosphate.—Ann. Inst. Agron. Moscou, 1916, v. 22, p. 104–114, through Exper. Sta. Rec. 1917, v. 36, p. 712.

Patch, E. L. One lot of precipitated calcium phosphate labeled "U. S. P." contained 1.52 per cent of calcium chloride; another lot labeled "Technical" contained but 1.1 per cent of calcium chloride.—J. Am. Pharm. Assoc. 1917, v. 6, p. 311.

CALCII SULPHIDUM CRUDUM.

Dohme, A. R. L. The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate of deterioration of calcium sulphide.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

CALX.

Dohme, A. R. L. It is difficult to obtain a good grade of calcium oxide due to incomplete calcination.—Proc. N. W. D. A. 1917, p. 307.

Whetzel, J. C. A report of extensive experiments to determine the effect of exposure to atmosphere during shipment on the quality of lime.—J. Ind. Eng. Chem. 1917, v. 9, p. 287–290.

Anon. Commercial lime may contain 30 per cent of magnesia also iron and other impurities.—J. Am. Pharm. Assoc. 1917, v. 6, p. 311.

Busvold, N. A description of a simple method for the determination of calcium oxide in the presence of calcium carbonate.—Tidsskr. Kem. Farm. Terap. 1917, v. 14, p. 143–144.

Dover, Mary V., and Marden, J. W. A comparison of the efficiency of some common desiccants including lime.—J. Am. Chem. Soc. 1917, v. 39, p. 1609–1614.

CALX CHLORINATA.

Chem. Fabrik Griesheim Elek.: Swedish patent No. 41898. For the preparation of high percentage calcium hypochlorite, moist calcium hydroxide is chlorinated by introducing so much chlorine that no free oxide remains, and the solid hypochlorite removed from the mother liquor. —Chem. Abstr. 1917, v. 11, p. 1732.

Roberts, J. G.: A sample of chlorinated lime taken from a cork-stoppered bottle that had been in stock for some time contained only 0.67 per cent of available chlorine. Another sample taken from an air-tight can yielded 29.33 per cent. -Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

Patch, E. L.: Three samples of chlorinated lime yielded 14.6, 30.07, and 35.7 per cent, respectively, of available chlorine. J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Taylor, R. L.: A study of the effect of light on solutions of bleaching powder. J. Soc. Dyers Colourists, 1917, v. 33, p. 246–250, through Chem. Abstr. 1918, v. 12, p. 979–980.

Dijon, Dubard: Notes on the disinfection of the hands with calcium and magnesium hypochlorites.—Rev. d'Hyg. v. 38, p. 892, through J. Pharm. chim. 1917, v. 15, p. 125.

CAMPHORA.

Asahi Camphor Refining Co.: Japanese patent No. 30606 describes a process for preparing pure powdered camphor.—Chem. Abstr. 1917, v. 11, p. 2390.

Anderson, George E.: It is estimated that the amount of gum camphor imported into the United States during the fiscal year ending June 30, 1917, will approximate 5,400,000 pounds of the crude material and 4,000,000 pounds of synthetic and refined camphor.—Com. Rep. 1917, No. 131, p. 886–887.

Anon.: An article dealing with the production of gum camphor in Florida.—Oil, Paint & Drug Rep. 1917, v. 91, No. 10, p. 18.

Hood, Samuel C.: Data on the factors causing the variation in the yield of camphor in the Florida camphor tree.—J. Ind. & Eng. Chem. 1917, v. 9, p. 552–555.

Anon.: According to figures occurring in the Board of Trade Journal, the production of camphor in Japan for the year ending March 31, 1917, is estimated at 2,148,197 pounds. The same journal estimates the production of camphor in Formosa for this period at 6,619,461 pounds.—Com. Rep. 1917, No. 86, p. 163.

Scidmore, George H.: It is stated that the Monopoly Office in Tokyo estimates the output of camphor in Formosa for 1917 at 11,616,000 pounds.—Com. Rep. 1917, No. 107, p. 500.

Anon.: Statistics showing the amount of gum camphor imported by various countries during the years 1913 to 1917 are given.—Oil, Paint & Drug Rep. 1917, v. 91, No. 25, p. 16.

Kauffmann, Hugo: A comprehensive description of the manufacture of artificial camphor.—Chem. Abstr. 1917, v. 11, p. 1913.

Kafuku, K.: The leaves of *Alpinia nutans* Roscoe contain 0.053 per cent of a volatile oil of camphor-like odor, the essential constituents of which are camphor (more than 20 per cent) and camphene (17 per cent).—J. Chem. Ind. Tokyo, 1917, v. 20, p. 340, through Chem. Abstr. 1917, v. 11, p. 2387.

Violle, H., and Roy, G.: A report of experiments showing the colloidal state of camphor in water in the presence of camphorated oil and a discussion of the biologic and therapeutic consequences.—Compt. rend. Acad. sc. 1917, v. 164, p. 648-650.

Leroy, H.: A paper dealing with the liquefaction of a mixture of camphor and phenol.—J. pharm. et chim. 1917, v. 16, p. 79-81.

Anon.: Kunnarelli uses camphor as a preservative for aqueous solutions of substances liable to change. He drops a bit of the drug into the bottle and floats it on the surface of the liquid. Not dissolving readily, its fumes appear to fill the bottle and destroy any germs which may enter. He has thus kept white of egg unaltered for 30 years, and a 5 per cent solution of gelatin for a year or more without change.—Merck's Rep. 1917, v. 26, p. 118.

Barnard, H. E.: One sample of camphor examined was rejected because of poor quality.—Bull. Indiana Bd. Health, 1917, v. 20, p. 184.

Joachimoglu, Georg: A comparative study of the action of d-, l-, and r-camphor. I. The toxic action on rats. II. The action on the isolated frog heart. III. The antiseptic action. No difference in the physiological action of the different forms was observed.—Arch. exper. Path. u. Pharmakol. 1917, v. 80, p. 1-7, 259-281 and 282-287.

CANNABIS.

Farwell, Oliver Atkins: The U. S. P. IX states that cannabis is derived from *Cannabis sativa* Linné or its variety *Indica* Lamarck. To quote Lamarck as the author of a botanical variety *Indica* is absurd, there never has been, so far as I have been able to ascertain, a properly described botanical variety under the name of *Indica*.—Drug. Circ. 1917, v. 61, p. 174.

Fuller, H. C.: The standard for cannabis is too high and the proper labeling of specimens in order to conform to the food and drugs act will cause some hardship to the legitimate drug trade, because one lot of drugs is disposed to druggists, so that the seller can not guarantee as strictly U. S. P.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

Klempner, J. K.: The requirement "yield of alcohol extractive is not less than 8 per cent" is too low. A good quality of drug will yield at least 10 per cent.—Drug. Circ. 1917, v. 61, p. 301. See also J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

Snyder, J. P.: The U. S. P. assay for cannabis has been much criticized, several workers declaring that the dose is too small to produce incoordination. This should be thoroughly investigated. From our experience we are inclined to believe that a larger dose is not necessary.—J. Am. Pharm. Assoc. 1917, v. 6, p. 714.

Hamilton, Herbert C.: The U. S. P. test for cannabis is objectionable because of the following conditions: (1) The inaccurate wording in the text. (2) The smallness of the test dose. (3) The absence of a uniform standard. (4) The nonessential features which add to the complications of the method with no commensurate gain in the activity or uniformity of the product.—Am. J. Pharm. 1917, v. 89, p. 61–71.

Lyons, A. B.: A resolution anent a standard for cannabis presented by the scientific section of the American Pharmaceutical Association in 1917. -J. Am. Pharm. Assoc. 1917, v. 6, p. 877–879.

Pearson, W. A.: Notes on the proposed standard fluid extract of cannabis for use in standardizing cannabis and its preparations.—J. Am. Pharm. Assoc. 1917, v. 6, p. 876.

Pittenger, Paul S.: Notes on the U. S. P. method for the physiological standardization of cannabis.—J. Am. Pharm. Assoc. 1917, v. 6, p. 866–869.

Anon.: Experiments conducted in the H. K. Mulford laboratories to determine if there is any difference in the activity of the male and female cannabis plants showed that the female plants tested 200 per cent of normal, while the activity of the male plants was only 50 per cent of normal. -Drug. Circ. 1917, v. 61, No. 3, p. 25.

Eckler, C. R., and Miller, F. A.: A report of an investigation to determine the deterioration of crude Indian cannabis on storing. The results of the tests indicate that the loss in activity is practically 100 per cent after about 50 months.—J. Am. Pharm. Assoc. 1917, v. 6, p. 872–875.

Tobler, Walther: From an investigation it is concluded that the diuretic principle of cannabis indica is a component of cannabinol, as there is no difference between the diuretic action of cannabinol before and after distillation. –Ztschr. exper. Path. u. Pharmakol. 1916, v. 18, p. 91–92, through Zentralb. Biochem. u. Biophys. 1917, v. 19, p. 47.

Perry, E. J.: *Cannabis indica* grown in South Carolina was found to yield 11.5 per cent seeds and 15.3 per cent oleoresin. These figures correspond to those obtained on the average for a good quality of Indian hemp.—Oil, Paint & Drug Rep. 1917, v. 92, No. 15, p. 56.

Dohme, A. R. L.: Two samples of American cannabis examined contained 15 per cent to 18 per cent of seed.—Proc. N. W. D. A. 1917, p. 519.

Patch, E. L.: A sample of American-grown cannabis examined was of fine color and appearance, but gave only 5.96 per cent of ether-soluble constituents against an average of 11 per cent in foreign-grown.—J. Am. Pharm. Assoc. 1917, v. 6, p. 333.

CANTHARIS.

Scoville, Wilbur L.: The U. S. P. still puts faith in cantharides preparations, although most of the evidence is against their reliability. The next revision committee should have positive evidence of reliable methods of extraction and of practical solvents for this drug, on which it can base its formulas.—Am. Druggist, 1917, v. 65, No. 1, p. 26.

van Zijp, C.: Chemical notes on cantharidin and its isolation from *Epicauta Ruficeps* Ill.—Pharm. Weekblad, 1917, v. 54, p. 295–301.

Gadamer, J.: Researches on the constitution of cantharidin. VI. Isocantharidin. VII. The pyrogenic decomposition of barium cantharate.—Arch. Pharm. 1917, v. 255, p. 277–302, 315–327, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 650 and 704–705.

Rudolph, A. W.: A study of certain reactions of cantharidin. These reactions may be explained by one or more of the three formulas for cantharidin proposed by Gadamer.—Arch. Pharm. 1916, v. 254, p. 423–476, through J. Chem. Soc. Lond. v. 112, part 1, p. 168–169.

Anon.: The United States Department of Agriculture announces that cantharides is sometimes adulterated with Chinese blister flies.—J. Am. M. Assoc. 1917, v. 69, p. 172.

Anon.: The cantharidin content of six samples of Chinese cantharides assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Lipsitz, Samuel T., et al.: A report of a case of polycythemia as a result of cantharides poisoning.—Arch. Int. Med. 1917, v. 20, p. 914–918.

Vasi, Vasco: Histological observations of changes in the kidneys in poisoning by cantharides, potassium dichromate and mercuric chloride.—Arch. sci. med. 1917, v. 40, p. 125–137.

CAPSICUM.

DeJong, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association states that the oleoresin standard of 15 per cent for capsicum seems too high, for an average of 26 ether assays put not more than 12 per cent as the average yield.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

Clayton, Leon A.: Some notes on the different varieties of red peppers and their origins.—Simmons's Spice Mill, 1917, v. 40, p. 48–49.

Bailey, E. M.: Data showing the need for changes in the standards for capsicum and saffron.—J. Ind. Eng. Chem. 1917, v. 9, p. 301.

Anon.: The oleoresin content of 4 samples of capsicum assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Lea, E. J.: Of two samples of capsicum examined, one was rejected.—Rep. California Bd. Health, 1917, p. 162.

Patch, E. L.: Six samples of capsicum examined yielded from 19.5 per cent to 24 per cent of alcohol extract and from 6 to 8 per cent of ash.—J. Am. Pharm. Assoc. 1917, v. 6, p. 311.

Saure et al.: The nonvolatile ether extract of three samples of capsicum tested was 16.24, 16.57, and 16.02 per cent, respectively The ash varied from 6.73 to 7 per cent.—Rep. Kansas Bd. Health, 1917, v. 13, p. 263.

Street, John Phillips: The examination of 17 commercial samples of cayenne pepper gave results as follows: Total ash, 5.35 to 8.56 per cent; crude fiber, 14.85 to 27.73 per cent; and nonvolatile ether extract, 3.94 to 19.21 per cent.—Rep. Connecticut Agric. Exper. Sta. 1917, p. 151.

CARAMEL, N. F.

Cunningham, Mary, and Dorée, Charles: Contributions to the chemistry of caramel. Part I. Caramelan.—J. Chem. Soc. Lond. 1917, v. 111, p. 589–608. See also Arthur Lapworth and Frederick Wykes, p. 790–798.

Roberts, J. G.: Of three samples of caramel examined, only one complied with the N. F., IV, requirements. One sample was low in specific gravity, while the other yielded a precipitate when treated with phosphoric acid.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

CARBO LIGNI.

Cole, Sydney W.: A note on the scarcity of pure blood charcoal in England.—Chem. & Drug. 1917, v. 89, p. 755.

Nikitin: Data relative to the heat of combustion of wood charcoal are presented.—J. Russ. Phys.-Chem. Soc. 1916, v. 48, p. 54–75, through J. Soc. Chem. Ind. 1917, v. 36, p. 282.

Joachimaglu, Georg: A method is given for estimating the adsorption capacity of charcoal by means of iodine solution. A charcoal should have such adsorptive capacity that 0.1 gram takes up at least the iodine equivalent of 10 cubic centimeters of N/10 solutions.—Biochem. Ztschr. 1916, v. 77, p. 1–13, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 42. See also Pharm. Weekblad, 1917, v. 54, p. 1173.

Gustafson, Bror: A report of experiments to determine the power of adsorption by charcoal in alcoholic solutions.—Chem. Abstr. 1917, v. 11, p. 554.

Richardson, Leon B.: Experimental data relative to the adsorption of carbon dioxide and ammonia by charcoal.—J. Am. Chem. Soc. 1917, v. 39, p. 1828–1848.

Valentiner, S.: A report of a peculiar phenomenon of gas adsorption by wood charcoal.—Chem. Abstr. 1917, v. 11, p. 1359.

Doroshevskii, A. G., and Pavlov, G. S.: A report of investigations dealing with the oxidizing effect of charcoal. In the presence of water vapor and alkali, sulphur is oxidized to sulphuric acid.—J. Russ. Phys. Chem. Soc. Proc. 1916, v. 48, p. 196, through Chem. Abstr. 1917, v. 11, p. 3171.

CARDAMOMI SEMEN.

Farwell, Oliver Atkins: The proper name for the plant from which cardamom is obtained is *Amomum Cardamomum* Linné. If the latter generic name is to be used the correct citation would be *Elettaria Cardamomum* (Linné) Maton.—Drug. Circ. 1917, v. 61, p. 231.

Memminger, Lucien: An account of the production of cardamom seed in south India, with statistics showing the quantities exported during the years 1914 to 1916.—Com. Rep. 1917, No. 301, p. 1158.

CARUM.

Alsberg, C. L.: As a tentative standard for caraway seed, the Bureau of Chemistry requires that the material shall not contain more than 3 per cent of harmless foreign matter and shall yield not more than 8 per cent of ash.—S. R. A.-Chem. 1917, No. 19, p. 51.

Holmes, E. M.: Remarks on the cultivation of caraway and dill.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 251–252.

Rusby, H. H.: A sample of caraway seed examined was contaminated with a sclerotium quite closely related to ergot.—J. Am. Pharm. Assoc. 1917, v. 6, p. 311.

CARYOPHYLLUS.

Farwell, Oliver Atkins: The proper authority for "*Eugenia aromatica* (Linné)" is "Baillon," not "O. Kuntze" as given in the Pharmacopoeia. The proper name, however, under *Eugenia* is *Eugenia caryophyllata* Thunb. The synonym "*Jambosa Caryophyllus* (Sprengel) Niedenzu" should be enclosed in marks of parentheses.—Drug. Circ. 1917, v. 61, p. 174.

Starrett, Henry P.: A consular report on the clove industry of Zanzibar.—Com. Rep. 1917, No. 135, p. 956–959.

Sindall, Harry E.: In a report on spices, data relative to the determination of moisture in whole and ground cloves are presented. The method employed involves distillation with kerosene.—J. Assoc. Off. Agric. Chem. 1917, v. 2, part 2, p. 197–200.

Street, John Phillips: The examination of eight commercial samples of cloves gave results as follows: Total ash, 5.96 to 7.62 per cent, crude fiber, 8.17 to 13.86 per cent, and nonvolatile ether extract, 6.40 to 19.86 per cent.—Rep. Connecticut Agric. Exper. Sta. 1917, p. 151.

Anon.: Notice of judgment No. 4778 relates to the adulteration of cloves.—S. R. A.-Chem. 1917, p. 351.

CASCARA SAGRADA.

Hubbard, W. S.: Methods for the identification of emodin-bearing drugs.—J. Ind. & Eng. Chem. 1917, v. 9, p. 518–521.

Beal, George D., and Okey, Ruth: Description of methods for the qualitative identification of the drugs containing emodin.—J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

CASCARILLA, N. F.

Roberts, J. G.: One lot of cascarilla bark examined was of undesirable quality because it contained about 20 per cent of twigs and stems, and did not comply with the standards given by various authorities.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

CAULOPHYLLUM, N. F.

Dohme, A. R. L.: One lot of blue cohosh examined contained 5 per cent of earthy material, 15 per cent of twin leaf root, and 3 per cent of unicorn.—Proc. N. W. D. A. 1917, p. 519.

CENTAURIUM, N. F.

Farwell, Oliver Atkins: The proper botanical designation for centauri is *Centaurium Centaurium* (Linné) W. F. Wight.—Drug. Circ. 1917, v. 61, p. 229.

CERA ALBA.

Anon.: An account of a visit to a plant for bleaching beeswax. The various steps in the process are described. —Chem. & Drug. 1917, v. 80, p. 477.

Dohme, A. R. L.: One sample of white wax was not of U. S. P. quality, as its acid number was only 12.8 and its ester number only 40.6, whereas the U. S. P. requires an acid number of not less than 17 nor more than 23, and an ester not less than 72 nor more than 79.—Proc. N. W. D. A. 1917, p. 515.

Ehmann, K. F.: Data showing the melting point, acid number, saponification value, and iodine value of 15 commercial samples of white wax.—J. Am. Pharm. Assoc. 1917, v. 6, p. 347.

CERA FLAVA.

Starrett, Henry P.: The total exportation of beeswax from British East Africa for the year ending March 31, 1915, is stated to amount to 1,563 hundredweight of 112 pounds. Germany took about 50 per cent of this; France, 15 per cent; United Kingdom, 14 per cent; Belgium, 11 per cent; Italy and Holland, the remainder.—Com. Rep. 1917, No. 69, p. 1111.

Anon.: A presentation of analytical data obtained in the examination of various kinds of waxes, including beeswax.—J. pharm. et chim. 1917, v. 15, p. 324–325; Répert. pharm. 1917, v. 28, part 2, p. 270–271.

Roberts, J. G. A sample from one lot of yellow beeswax examined showed evidence of having been adulterated, as its ester number was only 51.6 instead of the U. S. P. requirement of 72 to 77.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

W. G. N. v. d. S. A book review of a volume by Fr. Berger on the history and medicinal applications of honey and wax.—Chem. Weekblad, 1917, v. 14, p. 793.

CERATA.

Beringer, George M. The use of petrolatum in the preparation of cerates did not yield a uniformly smooth product and was not satisfactory in other respects; hence the return in the formula of white wax and benzoinated lard was decided upon.—Am. J. Pharm. 1917, v. 89, p. 350.

Roller, Emil. Since the official cerates all contain lard, they should be classed as ointments and the name cerate be omitted from the Pharmacopoeia.—D. A. Apoth. Ztg. 1917, v. 32, p. 31.

CERATUM CANTHARIDIS.

Asher, Philip. A method of assay for cantharides cerate should be included in the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

Beringer, George M. Acetic acid has been introduced into the formula for the preparation of cantharides cerate for the purpose of liberating the cantharidin and of aiding the solution of the latter in the turpentine.—Am. J. Pharm. 1917, v. 89, p. 350.

CERATUM RESINÆ COMPOSITUM, N. F.

Anon. Notes on the preparation and preservation of rosin cerate.—N. A. R. D. J. 1917, v. 23, p. 593.

CEREVISIÆ FERMENTUM COMPRESSUM, N. F.

Editorial. An article describing the manufacture of commercial yeast. Illustrated.—Am. Food J. 1917, v. 12, p. 143-148.

Cadwell, H. V. A description of the tests employed in the control of yeast manufacture.—Am. Food J. 1917, v. 12, p. 151-152.

Anon. For the preservation of compressed yeast, keeping in pure glycerin in a covered vessel in a dry place is recommended.—Pharm. Zentralh. 1916, v. 57, p. 761 through Schweiz. Apoth. Ztg. 1917, v. 55, p. 420.

Bokorny, T. Further methods for the preparation of permanent yeast are given.—Allg. Brauer u. Hopf. Ztg. 1916, v. 56, p. 1547-1550, through J. Soc. Chem. Ind. 1917, v. 36, p. 300.

Bokorny, T. A report of experiments showing the presence of emulsin and invertin in compressed yeast.—Biochem. Ztschr. 1916, v. 75, p. 376, through Chem. Abstr. 1917, v. 11, p. 260.

Anon.: An editorial discussing the therapeutic value of yeast.—J. Am. M. Assoc. 1917, v. 69, p. 826.

Hawk, Philip B., et al.: A report on the use of baker's yeast in diseases of the skin and of the gastrointestinal tract.—J. Am. M. Assoc. 1917, v. 67, p. 1243–1247.

Hess, A. F.: From experiments it is concluded that yeast has no antiscorbutic value.—Chem. Abstr. 1917, v. 11, p. 1461.

CETACEUM.

Lundin: The hydrostatic methods for the determination of the specific gravity of spermaceti are preferable to Hager's flotation method. The limits of the Ph. Germ. V for specific gravity, 0.940 - 0.945, are too narrow.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 221.

CHIRATA, N. F.

Farwell, Oliver Atkins: The proper botanical designation for chirata is *Swertia Chirayita* (Roxb.) Farwell.—Drug. Circ. 1917, v. 61, p. 229–230.

CHLORALUM HYDRATUM.

François, Maurice: Descriptions of methods for the identification and determination of the purity of chloral hydrate, and the quantitative estimation of chloral hydrate *per se* and in standard solutions and syrups.—Ann. Falsif. 1917, v. 10, p. 575–581; J. pharm. et chim. 1917, v. 16, p. 289–299.

Sayre, et al.: Three samples of chloral hydrate examined were of U. S. P. quality.—Rep. Kansas Bd. Health, 1917, v. 13, p. 169.

CHLOROFORMUM.

Michaelis, G.: U. S. patent No. 1,203,032. A procedure for the purification of chloroform which consists principally of shaking with sulphuric acid.—Chem. Abstr. 1917, v. 11, p. 85.

Utz: To 10 cubic centimeters of chloroform add as much benzidine as will lie on the point of a knife and shake gently when a clear solution will be formed. If the chloroform is pure the solution will keep unchanged in the dark for 24 hours. If 0.01 per cent of phosgene is present, the solution becomes cloudy almost at once. If chlorine is present the solution acquires a pale rose and then a blue color. If hydrochloric acid is present, the solution becomes cloudy at once.—Pharm. Zentralh. 1917, v. 58, p. 1–5, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 121.

Fujiwara, K.: A description of a new reaction for the detection of chloroform. The test is based on the color reaction produced by a reagent consisting of a solution of sodium hydroxide and pyridine.—Chem. Abstr. 1917, v. 11, p. 3201.

Graham, Evarts A.: A discussion of biochemical changes produced by chloroform and other anesthetics.—J. Nat. Dental Assoc. 1917, v. 4, p. 735-739; J. Am. M. Assoc. 1917, v. 69, p. 1666-1669.

Fiessinger, N., and Montas, R.: A report of a case of liver injury due to the administration of chloroform to produce anesthesia.—Rev. de Chirurgie, 1916, v. 35, p. 424, through J. Am. M. Assoc. 1917, v. 68, p. 1878.

CHONDRUS.

Piotrkowski: A discussion of the use of mucilage of Irish and Iceland moss as substitutes for salve bases, cold creams, glycerol, soap, and fat, also in the preparation of emulsions for the reduction of the bitter taste in certain drugs, especially laxatives, and finally as culture media for bacteria.—Chem. Zentralbl. 1916, v. 2, p. 158, through Chem. Abstr. 1917, v. 11, p. 1879.

CHRYSAROBINUM.

Hesse, O.: A reexamination of the constituents of commercial chrysarobin undertaken in consequence of Tutin and Clewer's description of the constituents of commercial chrysarobin. Purified chrysarobin consists of the anthranols, chrysophanol ($C_{15}H_{12}O_3$), and emodinol ($C_{15}H_{12}O_4$), and their methyl ethers. Chrysophanol methyl ether is not present in the chrysarobin of commerce which contains about 53 per cent of chrysophanol. The therapeutic action of the drug is due to the anthranols only.—Ann. Chem. 1917, v. 413, p. 350-378, through J. Chem. Soc. 1917, v. 112, No. 1, p. 276.

Eder, R.: A report of investigations dealing with the identification of the constituents of commercial chrysarobin.—Arch. Pharm. 1916, v. 254, p. 1, through Chem. Abstr. 1917, v. 11, p. 1252.

Unna, P. G.: Cignolin (1, 8-dihydroxyanthranol) is stated to have a much more energetic action on the skin than chrysarobin, which is the 3-methyl derivative.—Dermatol. Wchnschr. 1916, v. 62, No. 6-8, through J. Soc. Chem. Ind. 1917, v. 36, p. 565.

CIMICIFUGA.

Rusby, H. H.: The extract and fluid extract of cimicifuga are in the U. S. P. and the tincture is in the N. F. It is rather an unimportant drug, and it is not understood why more than one preparation is retained.—Pract. Drug. 1917, v. 35, No. 3, p. 27; Proc. Am. Drug Mfr. Assoc. 1917, p. 11.

CINCHONA.

Puente y Sánchez, Carlos: A discussion of the evaluation of the cinchona barks by the use of picrolonic acid. Experimental data are given.—Farm. Españ. 1917, v. 49, p. 689-691, 705-709, 721-72

Hebeisen, F.: A description of a method for the evaluation of cinchona bark.—Pharm. Weekblad, 1917, v. 54, p. 1173; Apoth. Ztg. 1917, p. 95.

van Itallie, L., and Lemkes, H. J.: A chemical examination of *Cinchona robusta*, a hybrid of *C. officinalis* and *C. calisaya*, showed that it is unsuitable as a possible source of quinine.—Pharm. Weekblad, 1917, v. 54, p. 1225–1234.

Rabe, Paul, and Böttcher, Bruno: A report of researches dealing with the constitution of the cinchona alkaloids. -Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2753-2756 through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 216-217 and Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 127–133, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 281.

Léger, E.: A report of researches dealing with the action of hydrobromic acid on cinchonine and its isomers, cinchoniline, cinchonigine, and apocinchonine, and the chemistry of other derivatives.—Bull. soc. chim. France, 1917, v. 23, p. 133–142, 142–146, 240–249, 328–335.

Kaufmann, Adolf, et al.: A report of researches dealing with the degradation of the cinchona alkaloids.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2299 2310, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 50.

Biddle, H. C., and Watson, Thomas: An investigation of the influence of varying concentration of hydrogen-ion on the optical rotation of isomeric alkaloids, cinchonine, cinchonidine, and cinchotoxine.—J. Am. Chem. Soc. 1917, v. 39, p. 968–974.

Glücksmann, C.: A report on the isolation of a new constituent from cinchona bark. The substance isolated is a green coloring matter called "tschirchin" by the author.—Schweiz, Apoth-Ztg. 1917, v. 55, p. 29 30; Chem. Abstr. 1917, v. 11, p. 1724.

Anon.: Of 15 samples of yellow cinchona assayed, the total alkaloidal content of 14 was above standard and 1 below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L.: The quality of all 15 shipments of cinchona bark examined was good and assayed from 6.5 per cent to 12 per cent total alkaloids.—Proc. N. W. D. A. 1917, p. 507.

Englehardt, H.: Of 19 samples of cinchona assayed, 3 were found to be below the U. S. P. standard of 4 per cent of ether-soluble alkaloids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 408.

Dohme, A. R. L.: Nine samples of cinchona examined tested 5.7 per cent and up to 10.2 per cent of alkaloids. Three of the nine were above 9.5 per cent.—Proc. N. W. D. A. 1917, p. 509.

Scoville, W. L.: Of 15 samples of cinchona examined, 2 contained 0.5 of ether-soluble alkaloids or less, 1 contained 0.84 per cent; 6 contained between 1 per cent and 2 per cent; 2 contained between 2 per cent and 3 per cent; 4 contained above 5 per cent, the highest containing 6.4 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 408.

CINCHONA RUBRA.

Denailly, Jean. Note on the alkaloidal content of *Cinchona succirubra* grown in a greenhouse.—Bull. Sc. pharmacol. 1917, v. 24, p. 32-33.

Anon. Of seven samples of red cinchona assayed, the total alkaloidal content of 6 was above standard and 1 below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

CINCHONINÆ SULPHAS.

Biddle, H. C., and Watson, Thomas. A study of the influence of varying concentration of hydrogen ion on the optical rotation of the isomeric alkaloids, cinchonine, cinchonidine and cinchotoxine.—J. Am. Chem. Soc. 1917, v. 39, p. 968-974.

CINNAMOMUM SAIGONICUM.

von Fellenberg. A colorimetric method for the evaluation of cinnamon, cassia and vanilla.—Am. Perf. 1917, v. 11, p. 424.

Dohme, A. R. L. One sample of cinnamon (Saigon) examined had been adulterated with cassia cinnamon.—Proc. N. W. D. A. 1917, p. 519.

Drummond, W. B. A favorable report on the use of powdered cinnamon as a prophylactic in measles.—Brit. M. J. 1917, v. 1, p. 765.

CINNAMOMUM ZEYLANICUM.

Farwell, Oliver Atkins. The proper binomial for this product is *Cinnamomum Cinnamomum* (Linné) Karsten.—Drug. Circ. 1917, v. 61, p. 174.

COCA (NONOFFICIAL).

Higgins, S. B. A short historical account of the manner in which coca came to be used as a masticatory agent.—Pract. Drug. 1917, v. 35, No. 5, p. 26-27.

Roberts, J. G. The only lot of coca leaves examined yielded 0.86 per cent of ether-soluble alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

COCAINA.

Denigès, G. A rapid microchemical method for the identification of solutions of cocaine and stovaine.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 323-326.

Hankin, E. H. Descriptions of tests for a number of narcotic and anesthetic drugs, including heroin, cocaine, cocaine substitutes, and some of the so-called hypnotics.—Indian J. M. Res. 1916, v. 3, p. 237, through Analyst, 1917, v. 42, p. 174.

Tunmann, O. The numbing of the tongue when cocaine is tasted is stated to be a reliable, practical test for distinguishing between cocaine and stovaine.—Apoth. Ztg. 1917, v. 32, p. 38.

Baumeister, Th.: Notes on the sterilization of solutions of cocaine hydrochloride. It is stated that solutions can be sterilized in a current of steam for one hour without decomposition, provided the operation is carried out in alkali-free glass containers.—Pharm. Weekblad, 1917, v. 54, p. 647.

Ebert: The methods of Tyndall and Baumeister for the sterilization of cocaine solutions are criticized. The author recommends that the solution be prepared with sterile water, and the container be subjected to the action of steam for three-quarters to one hour. The use of a container made of alkali-free glass is recommended.—Pharm. Ztg. 1917, v. 62, p. 53, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 175.

Barger, G. et al.: A report on the chemical and physiological properties of "collosol" cocaine.—Lancet, 1917, v. 193, p. 825.

Ducceschi, V.: The addition of cocaine (1.5 to 2.5 per cent) to the blood of the frog, fowl, and dog prevents or retards coagulation by arresting changes in the elements which normally agglutinate.—Arch. ital. biol. v. 64, p. 341-353 through Physiol. Abstr. 1917, v. 2, p. 114.

Towns, Charles B.: The horrible spread and use of cocaine grew out of so-called catarrh cures which contained from 3 to 5 per cent of the drug. This quantity was supposed to be harmless, but every druggist knows how the sale of one of these "catarrh cures" grew enormously merely on the strength of its cocaine content.—Pharm. Era, 1917, v. 50, p. 14.

COCCUS.

Stiles, George K.: The crop of Canary Island cochineal for the year 1916 is estimated to amount to approximately 727,500 pounds. There are three grades of cochineal from this source—namely, "cochinilla plateada, fina superior;" "cochinilla madres, negras superior;" and "cochinilla inferior." The third grade constitutes the crop of young or badly developed (sometimes diseased) specimens of the cochineal insect.—Com. Rep. 1917, No. 33, p. 519.

Muttelet, C. F.: Descriptions of some analytical characteristics of ammoniacal cochineal are given. A number of color reactions are described.—Anal. falsif. 1917, v. 10, p. 228–230.

CODEINA.

Tunmann, O.: A description of a microchemical method for the differentiation of morphine and codeine. The method is based on the fact that morphine and codeine yield crystalline salts with hydriodic acid which are different in form, and therefore permit of the differentiation of the two bases.—Apoth.-Ztg. 1916, v. 31, p. 148–150 through Analyst, 1917, v. 42, p. 48.

CODEINÆ SULPHAS.

Emery, W. O. A method for the estimation of caffeine, acetanilid, and codeine sulphate in mixtures containing the three substances is described.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 72-74.

Roberts, J. G. A sample of codeine sulphate examined was rejected on account of having a decided yellowish color and yielding 0.63 per cent. of ash.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

COFFEA TOSTA, N. F.

Issoglio, G. An investigation of the forms of adulteration of roasted whole coffee.—Giorn. farm. chim. 1915, v. 64, p. 337-347.

Eden, F. R.: U. S. patent No. 1,216,674 describes a method for extracting caffeine from coffee by means of hot water. The beans are roasted while still moist.—Chem. Abstr. 1917, v. 11, p. 1229.

Brauer, K. A discussion of the useful and injurious constituents of coffee, with special reference to the Thum method of cleaning.—Pharm. Zentralh. 1916, v. 57, p. 580-581.

Gomes, Theodore. A discussion of the physiological effects of coffee with special reference to the digestive tract.—J. Am. Inst. Homeop. 1917, v. 9, p. 791-795.

COLCHICI CORMUS.

Rippetoe, J. R. In the assay of colchicum corm the incomplete removal of starch results in the formation of obstinate emulsions when extracting with chloroform. If 10 instead of 15 grams of the drug are used and 150 mils of the filtrate representing 5 grams of the drug be taken, very good results are obtained.—Drug. Circ. 1917, v. 61, p. 501. See also J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

Patch, E. L. The colchicine content of four samples of colchicum root examined was 0.24, 0.26, 0.35, and 0.36 per cent, respectively. The ash ranged from 2.2 to 2.8 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 408.

Roberts, J. G. One lot of colchicum root examined proved to be of very poor quality, as it contained only 0.023 per cent of colchicine and had an undesirable chalky appearance.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

Anon. The colchicine content of five samples of colchicum corm assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

COLCHICI SEMEN.

Engelhardt, H. The three samples of colchicum seed examined assayed 0.605, 0.415, and 0.445 per cent of colchicine, respectively.—J. Am. Pharm. Assoc. 1917, v. 6, p. 408.

Roberts, J. G. Five lots of colchicum seed examined yielded 0.54 per cent to 0.64 per cent of colchicine, therefore complying with the

U. S. P. requirement of not less than 0.45 per cent of colchicine. Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

Anon.: The colchicine content of two samples of colchicum seed assayed was above standard. -Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

COLCHICINA.

Merck, E.: A note on chemically pure colchicine. The product usually sold is colchicine containing chloroform of crystallization —14 to 16 per cent of chloroform.—Pharm. Ztg. 1916, p. 509 through Pharm. Weekblad, 1917, v. 54, p. 281.

White, E. C.: One lot of colchicine examined showed a loss of 26.8 per cent (chiefly chloroform) at 100° C.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 83.

COLLODIUM CANTHARIDATUM.

Beringer, George M.: The extraction of the cantharides with a mixture of acetone and acetic acid, instead of chloroform, as directed in the U. S. P., VIII, yields a preparation which does not gelatinize or precipitate in a short time. Am. J. Pharm. 1917, v. 89, p. 350–351.

COLLODIUM FLEXILE.

Beringer, George M.: In flexible collodion U. S. P., IX, by the use of camphor and castor oil in appropriate proportions, a closely adhering, stronger, and more flexible film is produced than that yielded by the old formula, which contained Canada turpentine and castor oil.—Am. J. Pharm. 1917, v. 89, p. 351.

Dohme, A. R. L.: There appears to be no valid reason for replacing the Canada turpentine in flexible collodion with camphor.—Proc. N. W. D. A. 1917, p. 504.

Masland, W. E.: U. S. patent No. 1234921 describes the preparation of a solution containing 40 to 75 per cent of a mixture of aldol and castor oil with pyroxylin.—Chem. Abstr. 1917, v. 11, p. 2604.

Lindsay, W. G.: U. S. patent No. 1233374. Wet pyroxylin is mixed with tricresyl phosphate, benzyl benzoate, or other liquid solvent and the water expressed. Camphor, castor oil, or other modifying agent may be added.—Chem. Abstr. 1917, v. 11, p. 2612.

COLOCYNTHIS.

Rippetoe, J. R.: The requirement for the yield of ash in the case of colocynth should be not less than 8 nor more than 15 per cent. The pulp is always found to contain more than 8 per cent of ash.—Drug. Circ. 1917. v. 61, p. 501 See also J. Am. Pharm. Assoc. 1917, v. 6, p. 463.

CONFECTIO SENNÆ, N. F.

Editorial: Owing to the shortage of sugar in England it is suggested that honey or glucose be used in the manufacture of confection of senna.—Chem. & Drug. 1917, v. 89, No. 1961, p. 13.

CONIUM, N. F.

Roberts, J. G.: Two lots of conium seed examined yielded 0.63 and 0.89 per cent, respectively, of coniine.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 82.

CONVALLARIÆ RADIX, N. F.

Dohme, A. R. L.: One sample of convallaria root examined contained 25 per cent of plant leaf.—Proc. N. W. D. A. 1917, p. 519.

COPAIBA.

Dohme, A. R. L.: One lot of copaiba (Para) was soluble in 0.4 part and less of absolute alcohol. The addition of more than this amount showed a decrease in solubility.—Proc. N. W. D. A. 1917, p. 514.

Roberts, J. G.: A sample of balsam of copaiba (Para) was found to be soluble in 1.5 parts and less of absolute alcohol.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 81.

Anon.: Notice of judgment No. 4661 relates to the adulteration of balsam of copaiba.—S. R. A.-Chem. 1917, p. 214.

CORIANDRUM.

Rusby, H. H.: Great difficulties have been experienced during the year in obtaining coriander sufficiently clean. There is a remarkable tendency for this drug to contain not only various weed seeds in considerable amount but many little, hard, stonelike pellets of dirt, adding greatly to the ash content.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

CORNUS, N. F.

Farwell, Oliver Atkins: Those species of *Cornus* in which the inflorescences are surrounded by a corollalike involucre are better considered as constituting a distinct species. The proper name for the plant under this view is *Cynoxylon floridum* (Linné) Raf.—Drug. Circ. 1917, v. 61, p. 230.

CORYDALIS, N. F.

Farwell, Oliver Atkins: The proper spelling of the generic name for corydalis is *Bikukulla*, not *Bicuculla*.—Drug. Circ. 1917, v. 61, p. 230.

Gadamer, J., and Klee, W.: Researches on racemic corydaline.—Arch. Pharm. 1916, v. 254, p. 295, through Chem. Abstr. 1917, v. 11, p. 1464.

COUMARINUM, N. F.

Anon.: A description of a method for the synthesis of salicylic aldehyde and the preparation of coumarin therefrom.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 153.

Dox, Arthur W., and Gaessler, W. G.: An analysis of the iodine addition product of coumarin obtained in the Leach test for coumarin indicates that the compound probably has the empirical formula $(C_9H_6O_2)_2I$.—J. Am. Chem. Soc. 1917, v. 39, p. 114-117.

CREOSOTUM.

Smith, H. K., and Acree, S. F.: A report of an examination of a commercial sample of beech-wood creosote prepared by an American manufacturer.—J. Ind. & Eng. Chem. 1917, v. 9, p. 275–276.

Judd, R. C., and Acree, S. F.: A method of producing crude-wood creosote from hardwood tar.—J. Ind. & Eng. Chem. 1917, v. 9, p. 276–277.

Pieper, Ernest J., et al.: A study of the composition of the higher fractions of maple-wood creosote.—J. Ind. & Eng. Chem. 1917, v. 9, p. 462–465.

Roberts, J. G.: One lot of creosote (beech-wood) was rejected because it had a low specific gravity and contained coerulignol and other high-boiling constituents of wood tar. Another lot having a specific gravity slightly lower than the standard was considered unobjectionable.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

White, E. C.: Two lots of creosote (beech-wood) examined were not completely miscible with glycerin. One lot distilled mostly above 222° C. and contained wood-tar constituents. —Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

CRESOL.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not the U. S. P requirement for water solubility of cresol is too strict.—Proc. Am. Drug Mfg. Assoc. 1917, p. 195.

Fox, J. J., and Barker, M. F.: A method for the determination of phenol in commercial cresylic acid. After the addition of a certain amount of o-cresol the whole amount of phenol will appear in the first fractions of the distillate.—J. Soc. Chem. Ind. 1917, v. 36, p. 842–845.

Patch, E. L.: The specific gravity of five samples of cresol examined ranged from 1.028 to 1.038. One sample was not completely soluble in 120 parts of water.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

Vanderkleed, Charles E., and Ewe, George E. In solutions of alkaloids, cresol, in the proportion of 0.3 per cent, acts like an alkali and liberates alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 253-254.

CROCUS, N. F.

Pearson. General comments on saffron, including methods of cultivating the plant and collecting and preparing the flowers for market.—Simmons's Spice Mill, 1917, v. 40, p. 402-403.

CUBEBA.

Rusby, H. H. The oleoresin of cubeb is official in the U. S. P. and the fluid extract and tincture in the N. F. There is no relationship between the activity of the doses given in the two books.—Proc. Am. Drug Mfg. Assoc. 1917, p. 11; Pract. Drug. 1917, v. 35, No. 3, p. 27.

Dohme, A. R. L. A number of samples of cubebs examined contained from 10 per cent to 18 per cent of stems.—Proc. N. W. D. A. 1917, p. 520.

Anon. The oleoresin content of two samples of cubeb assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L. In the seven samples of cubeb examined the percentage of oleoresin varied from 17 to 20 per cent.—Proc. N. W. D. A. 1917, p. 507.

Engelhardt, H. The oleoresin content of six samples of cubeb examined varied from 14 to 20.52 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

CUPRI SULPHAS.

Guareschi, Icilio. An investigation of the loss of water of hydration by $CuSO_4.5H_2O$ under different conditions of humidity and temperature.—Atti accad. sci. Torino 1915, v. 50, p. 1125-1145, through J. Chem. Soc. Lond. 1915, v. 108, part 2, p. 774-775.

Dover, Mary V., and Marden, J. W. A comparison of the efficiency of some common desiccants including anhydrous copper sulphate.—J. Am. Chem. Soc. 1917, v. 39, p. 1609-1614.

Embrey, G. An account of some experiences in the use of copper sulphate for the destruction of algæ.—Analyst, 1917, v. 42, p. 264-271.

CYPRIPEDIUM, N. F.

Farwell, Oliver Atkins. The proper botanical designation for lady slipper is *Cypripedium hirsutum* (Miller) Farw.—Drug. Circ. 1917, v. 61, p. 230.

DAMIANA, N. F.

Dohme, A. R. L. Damiana has in late years been very largely and extensively adulterated with stems and branches of the plant, which, of course, are inert and worthless.—Proc. N. W. D. A. 1917, p. 513.

DIACETYLMORPHINA.

Schaefer, Hugo H.: From the examination of commercial specimens of diacetylmorphina and its hydrochloride, it is concluded that the U. S. P. requirements concerning the purity of this article are by no means too severe and will be easily met by the manufacturer. All of the samples commonly found on the market to-day, while showing some variations, are of sufficient purity to pass the official tests.—J. Am. Pharm. Assoc. 1917, v. 6, p. 140–142.

Müller, R.: A rapid method for determining small amounts of heroin consists in observing the color when 1 to 3 milligrams are added to a mixture consisting of 1 gram of 1 per cent sulphuric acid and 1.5 grams of a solution composed of 600 parts of sulphuric acid, 300 parts of water, and 25 parts of formaldehyde. A pale yellow to cherry-red color will develop, depending upon the amount of heroin present.—Rev. farm. 1916, v. 5, through Giorn. farm. chim. 1917, v. 66, p. 227.

Hankin, E. H.: Descriptions of tests for a number of narcotic and anesthetic drugs, including heroin, cocaine, cocaine substitutes, and some of the so-called hypnotics. —Indian J. M. Res. 1916, v. 4, p. 237, through Analyst, 1917, v. 42, p. 174.

McNally, W. D.: A description of a method for the quantitative separation of heroin from organs and body tissues. The heroin is extracted at a low temperature with dilute acid, and the alkaloid is precipitated from the acid solution by means of aluminum silicate.—J. Lab. & Clin. Med. 1917, v. 2, p. 649–654.

McNally, William D.: A report of two cases of fatal heroin poisoning.—J. Lab. & Clin. Med. 1916-1917, v. 2, p. 570–572.

Towns, Charles B.: Heroin is to-day doing more harm than any other opiate, although it is a comparatively recent morphine product, and was first used in preparations classed as cough mixtures. But any preparation containing heroin is absolutely sure to establish a tolerence if taken regularly.—Pharm. Era, 1917, v. 50, p. 14.

DIASTASUM.

Anon.: Netherlands patent No. 1878. Extraction and concentration of diastase are effected in the presence of reducing agents by adding small quantities of the latter at about 40° C.—Chem. Abstr. 1917, v. 11, p. 2026.

Boidin, A., and Effront, J.: U. S. patent No. 1227525. Diastases and toxins are prepared by the action of oxidizing enzymes upon a wort containing at least 1 part of assimilable nitrogenous material to 15 parts of carbohydrates. —Chem. Abstr. 1917, v. 11, p. 2263.

Rakuzin, M. A., and Flier, G. D.: A report of researches dealing with the optical properties of diastase and its adsorption by kaolin and by aluminum hydroxide. —J. Russ. Phys. Chem. Soc. 1916, v.

48, p. 321–324, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 181.

White, E. C.: All the diastase examined tested 1:100 instead of 1:50, as required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

DIGITALIS.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not digitalis and its products deteriorate, and which are the most desirable.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

Alsberg, C. L.: Examination of certain samples of importations of "digitalis" leaves by the Bureau of Chemistry has shown that the article consisted of *Digitalis thapsi* and not *Digitalis purpurea*.—S. R. A.-Chem. 1917, No. 19, p. 51.

Hoyer, Otto: A sample of digitalis powder was found to be a mixture of powdered verbascum and inula conyza leaves. Another sample examined was found to be adulterated with powdered tilia flowers.—Ztschr. allgem. osterr. Apoth.-Ver. 1917, v. 11; Apoth. Ztg. 1917, v. 32, p. 69, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 175.

Nilsson, Axel: A note on exceptionally active leaves found in a lot of digitalis imported from France. A detailed histological description of these leaves is given.—Svensk farm. Tidskr. 1917, v. 21, p. 221–224.

Holmes, E. M.: Attention is called to the fact that Spanish digitalis has appeared on the market. As two wild species of digitalis (*Digitalis thapsi*, Linn. and *Digitalis mariana*) grow in Spain, the author advises that the relative activity of these different species be determined before the Spanish article is accepted as a substitute for the official species.—Pharm. J. 1917, v. 98, p. 351.

Anon.: According to Wasicky the leaves of *Digitalis ambigua*, which is abundant in Austria, are as active as the leaves of *D. purpurea*, and can, therefore, take the place of the latter.—Chem. Ztg. v. 41, p. 99, through Pharm. J. 1917, v. 98, p. 375.

Farwell, O. A., and Hamilton, H. C.: On the histology and pharmacology of *Digitalis Thapsi* Lin. The observed toxicity of the drug was three times that of the average official variety.—Am. J. Pharm. 1917, v. 89, p. 147–154.

Wasicky, R.: Biological tests with *Digitalis ambigua* Murr. by the "one-dose" method of Hale showed it to be as valuable as the official *Digitalis purpurea* L.—Pharm. Post, 1916, v. 49, p. 297–298, through Chem. Abstr. 1917, v. 11, p. 2017.

Robb, G. B.: From experiments, it is concluded that wild American digitalis obtained from the West is physiologically active and may be utilized as a source of supply for making the official preparations.—Public Health Rep. 1917, v. 32, p. 377–380.

Sharp, Gordon: Notes on the physiological activity of digitalis grown in India.—Pharm. J. 1917, v. 99, p. 108.

Pratt, Joseph H., and Morrison, Hyman: Tests of the pharmacological activity of American-grown digitalis. The best American digitalis was found to be a Wisconsin leaf assaying 0.7 milligram per gram of frog.—J. Pharmacol. 1917, v. 9, p. 341–342.

Morris, R. Edwin: Notes on the standardization of digitalis, with experimental data showing the potency of Wisconsin, Minnesota, and English digitalis leaves.—Journal-Lancet, 1917, v. 37, p. 176–181.

Morris, R. E.: A report on the potency of different species of digitalis grown in the gardens of the University of Minnesota.—J. Am. M. Assoc. 1917, v. 68, p. 1065.

Hamilton, Herbert C.: The U. S. P. test for heart tonics is criticized because of the following features: (1) The inaccuracy of the method because the end point is obscured by the variable rate of absorption and shock in exposing the heart. (2) The standard because it is not obtained from the official drug and is not uniform in composition or activity.—Am. J. Pharm. 1917, v. 89, p. 61–71.

Krough, M.: A report of experiments with the isolated frog heart method for the standardization of digitalis. It is noted that the heart of the brown frog (*Rana temporanea*) behaves differently from the heart of the green frog (*Rana esculenta*). An abstract.—Ugeskrift for Laeger, Copengahen, 1917, v. 79, p. 475, through J. Am. M. Assoc. 1917, v. 68, p. 672.

Pittenger, Paul S.: A criticism of the technique recommended for injecting doses into the frog in the biological assay for drugs of the digitalis series.—J. Am. Pharm. Assoc. 1917, v. 6, p. 869–870.

van Leeuwen, W. Storm: Researches on the physiological evaluation of digitalis and strophanthus preparations.—Pharm. Weekblad, 1917, v. 54, p. 391–412.

van Leeuwen, W. Storm: A comparison of Hatcher's method with other methods for the standardization of digitalis. The author concludes that Hatcher's method is simpler and more accurate than the other methods now in use.—Pharm. Weekblad, 1917, v. 54, p. 890–892.

Dohme, A. R. L.: All shipments of digitalis examined were of good quality, and also met the U. S. P. biologic test.—Proc. N. W. D. A. 1917, p. 508.

Dohme, A. R. L.: Several samples of digitalis seed examined contained excessive amounts of sand and chaff.—Proc. N. W. D. A. 1917, p. 520.

Roberts, J. G.: One sample of digitalis examined contained about 15 per cent of stems and about 10 per cent of capsules. Four out of 11 samples examined were spurious. One lot of genuine digitalis leaves examined was considered of subnormal quality on account of its low physiological activity, and because it contained about 25 per cent of stems.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

Kiliani, H.: An account of work already published on the digitalis glucosides.—Arch. Pharm. 1916, v. 254, p. 255-295, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 468.

Meyer, Ernst: A quantitative investigation of the active glucosides occurring in digitalis leaves from different species and in certain commercial digitalis preparations.—Arch. exper. Path. u. Pharmakol. 1917, v. 81, p. 261-288.

Straub, Walther: Analytical data relative to the quantities of active principles in digitalis leaves and seed are presented and discussed.—Arch. exper. Path. u. Pharmakol. 1917, v. 80, p. 52-71; J. Soc. Chem. Ind. 1917, v. 36, p. 734.

Straub, Walther: A study of the development of the typical glucosides of the leaf in germinating and growing digitalis plants.—Biochem. Ztschr. 1917, v. 82, p. 48-59, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 615.

Straub, Walther: A comparison of the constituents of various digitalis preparations with those normally present in the leaves.—Münch. med. Wchnschr. 1917, v. 64, p. 513-514, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 257.

Wasicky, R.: A description of a new color reaction for the water-soluble active glucosides of digitalis leaves. The color is produced by a reagent consisting of [illegible] dissolved in hydrochloric acid and ferric chloride solution.—Ztschr. allgem. Österr. Apoth.-Ver. 1916, v. 54, p. 263, through Physiol. Abstr. 1917, v. 2, p. 288.

Burmann, James: The author finds for carefully purified gitaline (= digitoxin) the following values: [α]D = 25.5° C. in chloroform and —15.8° C. in alcohol; molecular weight 539 by the ebullioscopic method, chloroform being the solvent.—Bull. soc. chim. 1917, v. 21, p. 290-293.

Anon.: The H. K. Mulford Co. reports that a maximum of 12 per cent of oil has been obtained from certain samples of digitalis. A recent sample of the oil examined had a specific gravity of 0.9368 at 25° C., a saponification number of 205.8, and an iodine value of 64.5.—Drug. Circ. 1917, v. 61, No. 4, p. 25.

von Weizsäcker, V. F.: Observations on the distribution of glucosides which produce heart action.—Arch. exper. Path. u. Pharmakol. 1917, v. 81, p. 247-290, through Physiol. Abstr. 1917, v. 2, p. 527.

[illegible], J. B.: A discussion of the physiological action of digitalis.—Hahnemann. Month. 1917, v. 52, p. 221-224.

de Boer, S.: A discussion of the action of digitalis on the frog heart with 16 illustrations (charts). –Nederlandsch Tijschrift voor Geneeskunde, Amsterdam, 1917, v. 1, p. 701, through J. Am. M. Assoc. 1917, v. 68, p. 1671.

Ives, Robert F.: A discussion of the proper use of digitalis and its preparations in the practice of medicine.—New York M. J. 1917, v. 105, p. 1135–1137.

Hatcher, Robert A.: A discussion of digitalis therapy in relation to the present shortage in drugs.—J. Am. M. Assoc. 1917, v. 69, p. 1524–1525.

Cohn, Alfred E., and Jamieson, Ross A.: A study of the action of digitalis in pneumonia. –J. Exper. M. 1917, v. 25, p. 65–81.

Eggleston, Cary: Researches to determine the influence of large doses of digitalis and digitoxin on the blood pressures in man.—J. Am. M. Assoc. 1917, v. 69, p. 951–955.

DROSERA, N. F.

Farwell, Oliver Atkins: If *Drosera anglica* Huds. were adopted instead of *Drosera intermedia* Hayne, the other names remaining as given, the result would be more in accordance with the rules of priority.—Drug. Circ. 1917, v. 61, p. 230.

ECHINACEA, N. F.

Roberts, J. G.: About 25 per cent of one lot of echinacea examined was moldy.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

ELIXIRIA.

Brown, L. A.: The N. F., IV, has adopted a number of elixirs as flavoring agents, or vehicles, with a smaller alcohol content, to obviate the objection to the undersirable effect of that substance. They are compound elixir of almond, compound elixir of cardamon, and elixir of vanillin.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 37.

Cook, E. Fullerton: As the elixirs of the N. F., III, were often too strongly alcoholic, especially those containing aromatic elixir, a number of new vehicle elixirs of low alcoholic strength have been introduced into the N. F., IV.—J. Am. Pharm. Assoc. 1917, v. 6, p. 77.

Congdon, Leon A.: The following are some of the elixirs which were most often found to be deteriorated in the drug stores of Kansas: Elixir of licorice; elixir of digitalis; elixir of iron, quinine, and strychnine phosphate; elixir of cinchona, iron, and strychnine; elixir of iron and ammonium acetate; simple elixir; and elixir of pepsin and bismuth.—Proc. Kansas Pharm. Assoc. 1917, p. 89.

Hommell, P. E.: The elixirs of ferric hypophosphite, ferric phosphate, ferric pyrophosphate, and ferric lactate should be dropped from the N. F., as physicians prefer a combination of vegetable tonics.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

Cook, E. Fullerton: The bromide elixirs of the N. F. IV. are open to criticism in that the content of flavoring agent is much reduced and does not cover well the taste of the bromide.—J. Am. Pharm. Assoc. 1917, v. 6, p. 77.

ELIXIR AMMONII BROMIDI, N. F.

Hommell, P. E.: There is no therapeutic reason for the existence of the elixir of ammonium bromide. It should, therefore, be dismissed.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR AROMATICUM.

Cook, E. Fullerton: It is unfortunate that purified talc, which is not a satisfactory filtering medium, was not replaced by purified siliceous earth in the formula for the preparation of aromatic elixir. The latter substance greatly increases the speed of filtration and clarifies the elixir more promptly.—J. Am. Pharm. Assoc. 1917, v. 6, p. 75.

Burge, J. O.: A modification of the U. S. P. method for the preparation of aromatic elixir consists in the use of paper pulp as the filtering medium.—Pract. Drug. 1917, No. 3, p. 21.

ELIXIR BISMUTHI, N. F.

Hommell, P. E.: The elixir of bismuth is a valuable addition to the N. F. It is very palatable, a good sedative, and astringent to the mucous linings of the alimentary tract. The bismuth exists in the elixir as oxide and is preferable to the subnitrate and subcarbonate, which have drawbacks.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR BUCHU, N. F.

Hommell, P. E.: The elixir of buchu should be dismissed from the N. F., as the elixir of buchu compound "fills the bill."—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR CATHARTICUM COMPOSITUM, N. F.

Anon.: Directions for preparing compound cathartic elixir from the crude drugs, instead of the fluid extracts, are given.—N. A. R. D. J. 1917, v. 24, p. 1058-1059.

ELIXIR CINCHONÆ ALKALOIDORUM, N. F.

Cook, E. Fullerton: The title of the elixir of cinchona, N. F. III, has been changed to elixir of cinchona alkaloids in order to meet the Government regulations of misbranding. It is unfortunate that the more cumbersome title had to be adopted, for it will never be popular among prescribers.—J. Am. Pharm. Assoc. 1917, v. 6, p. 78.

Hommell, P. E.: The acme of pharmaceutic and therapeutic science is exhibited in the cinchona elixirs and their combinations. The most fastidious prescribers will be pleased and the best therapeutic results obtained in their administration.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR CORYDALIS COMPOSITUM, N. F.

Anon.: Notes on the preparation of compound elixir of corydalis.—N. A. R. D. J. 1917, v. 24, p. 8 and 17.

ELIXIR FERRI, QUININÆ, ET STRYCHNINÆ, N. F.

Pozen, M. A.: Of 46 samples of elixir of iron, quinine, and strychnine examined, 43 were rejected for being below standard.—Rep. District of Columbia Health Off. 1917, p. 50–51.

Tice, William G.: One sample of elixir of iron, quinine, and strychnine examined was below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

ELIXIR FERRI, QUININÆ, ET STRYCHNINÆ PHOSPHATUM.

Brown, L. A.: The elixir of iron, quinine, and strychnine phosphates has been dropped from the U. S. P. and refused admission to the N. F. "because of difficulties or imperfections which render it pharmaceutically unsatisfactory." It would seem that the revision committee of either the U. S. P. or N. F. could have eliminated these "difficulties or imperfections" and retained this very popular and widely used preparation.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 38.

Glover, W. H.: It is regretted that the elixir of the phosphates, of iron, quinine, and strychnine has been dropped from the U. S. P. A satisfactory preparation can be made by following the modified method suggested by Charles Caspari, jr. –J. Am. Pharm. Assoc. 1917, v. 6, p. 1062.

Scoville, Wilbur L.: The elixir of the phosphates of iron, quinine, and strychnine has been dropped from the U. S. P. and N. F. because the research which is needed to produce a satisfactory formula has not been done.—Am. Druggist, 1917, v. 65, No. 1, p. 25.

Frary, Guy G.: Three of 20 samples of elixir of iron, quinine, and strychnine phosphates examined were not of U. S. P. quality.—Rep. South Dakota F. & D. Com. 1917, p. 103.

ELIXIR GENTIANÆ, N. F.

Cook, E. Fullerton: The N. F., IV, formula for the preparation of elixir of gentian contains sodium citrate. This is an improvement over the old process, as the bitterness of the gentian, which was impaired through the treatment with ferric hydroxide, is now retained.—J. Am. Pharm. Assoc. 1917, v. 6, p. 78.

ELIXIR GLYCEROPHOSPHATUM, N. F.

Pfalb, P. Henry: A precipitate frequently forms in the elixir of glycerophosphates after a few weeks standing due to the separation of a portion of the calcium salt. By increasing the quantity of phosphoric acid in the formula from 8 cubic centimeters to 10 cubic centimeters, the preparation will keep indefinitely.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 139.

ELIXIR GLYCYRRHIZÆ AQUOSUM, N. F.

Hommell, P. E.: There can be no need for the aqueous elixir of licorice while the aromatic elixir of licorice is official. It should therefore be dismissed.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR GUARANÆ, N. F.

Hommell, P. E.: There is absolutely no need for the elixir of guarana in the N. F. Guarana is a nervine formerly employed for sick headache, especially those big heads following an alcoholic debauch. In these days its action is not rapid enough and coal-tar derivatives are used instead.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR PEPSINI ET RENNINI COMPOSITUM, N. F.

Anon.: The H. K. Mulford Co. report that kieselguhr is a very satisfactory agent for clarifying the essence of pepsin, and that it does not affect in the least the activity of the ferments in the preparation.—Drug. Circ. 1917, v. 61, No. 11, p. 25.

Carey, F. W.: One sample of essence of pepsin examined was rejected.—Bull. Michigan D. & F. Dept. 1917, No. 258–259, p. 18.

ELIXIR POTASSII ACETATIS, N. F.

Hommell, P. E.: There is no need for an elixir of potassium acetate while the one containing juniper exists. The latter is the best for use in dropsies of renal or cardiac origin.—Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR POTASSII BROMIDI, N. F.

Carey, F. W.: Of seven samples of elixir of potassium bromide examined, five were rejected because they did not meet the N. F. requirements.—Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16; No. 258–259, p. 18; No. 260–261, p. 33; No. 264–267, p. 24.

ELIXIR RUBI COMPOSITUM, N. F.

Anon.: Notes on the preparation and preservation of compound elixir of blackberry.—N. A. R. D. J. 1917, v. 24, p. 1050.

ELIXIR SODII SALICYLATIS, N. F.

Hommell, P. E.: The syrup in the elixir of sodium salicylate should be removed and a proper proportion of glycerin should be added.—Proc. New Jersey Pharm. Assoc. 1917, p. 80

ELIXIR SODII SALICYLATIS COMPOSITUM, N. F.

Anon.: In comments on the preparation of compound elixir of sodium salicylate, it is stated that the pharmacist should give careful attention to the quality of sodium salicylate, as much of the salt appearing on the market is unfit for use in medicine.—N. A. R. D. J. 1917, v. 23, p. 942.

ELIXIR TERPINI HYDRATIS, N. F.

Hommell, P. E.: There is no need for the syrup in the elixir of terpin hydrate, as the glycerin will suffice for the sake of palatability and demulcency.—Proc. New Jersey Pharm. Assoc. 1917, p. 81.

ELIXIR TRIUM BROMIDORUM, N. F.

Anon.: In commenting on the N. F. formula for the preparation of the elixir of three bromides, the necessity of using portions of the same sample of cudbear in preparing different batches of elixir, in order that uniformity in the color of the preparation may be maintained, is pointed out. -N. A. R. D. J. 1917, v. 25, p. 185.

ELIXIR VANILLINI COMPOSITUM, N. F.

Hommell, P. E.: The elixir of vanillin compound should not have been placed in the N. F., as it is a most miserable flavoring agent, very sickening. For flavoring purposes a good tincture of vanilla bean is to be preferred. —Proc. New Jersey Pharm. Assoc. 1917, p. 80.

ELIXIR VIBURNI PRUNIFOLII, N. F.

Hommell, P. E.: The formula of this elixir should read: Fluid extract of viburnum prunifolium, 4 fluid ounces; compound tincture of cardamom, 2 fluid ounces; glycerin, 2 fluid ounces; and aromatic elixir, 24 fluid ounces.—Proc. New Jersey Pharm. Assoc. 1917, p. 81.

EMETINA (NONOFFICIAL COMPOUNDS).

Dale, H. H., and Dobell, Clifford: An account of some experiments on the therapeutics of amebic dysentery.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 399–459.

Imbrie, C. G., and Roche, W.: A report on the treatment of *Amoeba hystolytica* carriers with emetine bismuthous iodide.—Lancet, 1917, v. 192, p. 17.

Gepps, Margaret W., and Meakins, J. C.: The detection and treatment with emetine bismuthous iodide of amoebic dysentery carriers among cases of irritable heart.—Brit. M. J. 1917, v. 2, p. 645–648.

Low, George C.: A report on the use of emetine bismuthous iodide in the treatment of amoebic dysentery, amoebic hepatitis, and general amoebiasis.—Lancet, 1917, v. 192, p. 482–485.

Lillie, D. G. and Shepheard, S.: A report on the treatment of Entamoeba histolytica "carriers" with emetine bismuthous iodide.—Lancet, 1917, v. 193, p. 418–419.

Banks, C. et al.: A report on the treatments of 102 carriers of amoebic dysentery with emetine bismuthous iodide.—Lancet, 1917, v. 193, p. 73–77.

EMETINÆ HYDROCHLORIDUM.

Méry, H., and Mercier: An investigation of the toxicity of emetine hydrochloride. The lethal dose for rabbits by injection is given as 0.1 to 0.12 gram per kilogram. The effects of cumulative poisoning are also considered.—Compt. rend. soc. biol. 1917, v. 80, p. 592–594.

Dalimier, R.: Observations on the toxicity of emetine hydrochloride.—L'Union pharm. 1917, v. 58, p. 191. Year Book of Pharmacy, 1917, p. 221.

Balfour, Andrew, and Pyman, Frank Lee: The toxicity of emetine, a compilation for the benefit of the medical officers serving with the British Army.—J. Roy. Army Med. Corps, 1916, v. 26, p. 35 through Chem. Abstr. 1917, v. 11, p. 171.

Pick, Ernest P. and Wasicky, Richard: A pharmacological analysis of emetine.—Physiol. Abstr. 1917, v. 2, p. 139.

Pyman, F. L., and Wenyon, C. M.: A study of the action of certain emetine derivatives on amoebæ.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 237–241.

[illegible], Luis V.: A report of a case of poisoning due to the administration of emetine hydrochloride in the treatment of amebic dysentery.—Gaceta Med. de Caracas, 1916, v. 23, p. 7–8 through Arch. med. et pharm. nav. 1917, v. 103, p. 390–391.

Johnson, H. H., and Murphy, J. A.: A report on the toxic effect of emetine hydrochloride observed in the treatment of 142 cases of amebic dysentery. An abstract.—J. Am. M. Assoc., 1917, v. 68, p. 313.

EMPLASTRUM BELLADONNÆ.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to improve the assay method for belladonna plaster, and to determine the rate of deterioration, if any.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

EMPLASTRUM PLUMBI.

[illegible], E.: Lead plaster is prepared by triturating 200 parts of litharge with 25 parts of liquid paraffin, adding 500 parts of oleic acid, allowing the mixture to stand until the reaction is complete, and finally heating on a water bath to insure complete solution of the lead oxide.—Apoth. Ztg. through Pharm. Post, 1917, v. 50, p. 197.

EMPLASTRUM SINAPIS.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate of deterioration, if any, of mustard plasters.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

EMULSA.

Asher, Philip: Assay processes should be given in the U. S. P. for the emulsions of asafetida and cod-liver oil.—Am. J. Pharm. 1917, v. 89, p. 174.

Roon, Leo.: A discussion of pharmaceutical emulsions from the colloidal standpoint.—J. Am. Pharm. Assoc. 1917, .v 6, p. 263–266; J. Ind. & Eng. Chem. 1917, v. 9, p. 156–161.

Crockett, William G., and Oesper, Ralph E.: A contribution to the theory of emulsification based on pharmaceutical practice.—J. Ind. & Eng. Chem. 1917, v. 9, p. 967–969.

Stocking, Charles H.: A presentation of experimental data showing the influence of viscosity on the emulsification of oils.—J. Am. Pharm. Assoc. 1917, v. 6, p. 952–954.

Spalding, Clarence: Notes on the preparation of emulsions of hydrocarbon greases by the use of the higher alcohols as emulsifying agents.—Proc. Connecticut Pharm. Assoc. 1917, p. 61–65.

Askenasy, P.: U. S. patent No. 1234714. Emulsions are thickened by adding bead-like or globular pieces of glue or gelatin. After they have absorbed the desired amount of water they are removed from the thickened liquid.—Chem. Abstr. 1917, v. 11, p. 2603.

H. R. K.: A review of a pamphlet by Ernest Lazuech entitled "*Lois fondamentales sur les émulsions.*"—Chem. Weekblad, 1917, v. 14, p. 903.

EMULSUM AMYGDALÆ.

Hommell, P. E.: Although the emulsion of almonds is an ideal, demulcent in bronchial, laryngal, and urinary congestion, yet it is so seldom prescribed that I think the best place for it would be the N. F., and then educate the doctors to prescribe it.—Proc. New Jersey Pharm. Assoc. 1917, p. 78.

EMULSUM ASAFŒTIDÆ.

Asher, Philip: The U. S. P. should prescribe a test for the emulsion of asafetida to show that it has not been prepared from the tincture.—Am. J. Pharm. 1917, v. 89, p. 174.

Hommell, P. E.: The emulsion of asafetida should have been placed in the N. F. It is rather a mild antispasmodic, and I believe it has seen its best days. Other agents have taken its place. A writer recently stated that the benefits derived from asafetida are due either to the alcohol contained in the preparation or to psychic influences.—Proc. New Jersey Pharm. Assoc. 1917, p. 78.

EMULSUM OLEI MORRHUÆ.

Anon: in commenting on the U. S. P. directions for the preparation of emulsion of cod liver oil, the permission to use other flavors beside methyl salicylate is criticised.—N. A. R. D. J. 1917, v. 25, p. 16.

Indiana Board of Health: Of seven samples of emulsion of cod liver oil labeled "U. S. P." the oil content varied from 18.2 to 45.6 per cent, the standard being 44 per cent by weight. The oil obtained from the low percentage product was not pure cod liver oil.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

EMULSUM OLEI MORRHUÆ CUM CALCII LACTOPHOSPHAS, N. F.

Hommell, P. E.: The properties of the cod liver oil emulsions of the N. F. can be enhanced, also the keeping qualities, by decreasing the amount of syrup and replacing with glycerin.—Proc. New Jersey Pharm. Assoc. 1917, p. 78.

EMULSUM OLEI MORRHUÆ CUM MALTO, N. F.

Richmond, H. D., and Hutchinson, F. G.: A rapid method for the determination of oil in malt and cod liver oil preparations is described.—J. Soc. Chem. Ind. 1917, v. 36, p. 273.

EMULSUM OLEI RICINI, N. F.

Hommell, P. E.: The emulsion of castor oil is a failure from the standpoint of palatability and it will therefore never become popular.—Proc. New Jersey Pharm. Assoc. 1917, p. 78.

EMULSUM OLEI TEREBINTHINÆ.

Hommell, P. E.: A most valuable emulsion in the U. S. P. is that of oil of turpentine. It is an ideal astringent for various forms of hemorrhage and lessens excessive secretion in bronchial troubles.—Proc. New Jersey Pharm. Assoc. 1917, p. 78.

ERGOTA.

Tschirch, A.: A hundred years of researches on ergot. A careful review of the development of chemical, biological, and pharmacological knowledge of ergot is given.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 405–408, 417–421, 429–431, 445–447, and 457–459.

Snyder, J. P.: It is to be regretted that the U. S. P. has not provided a physiological assay for ergot, as very good results are obtained by the blood-pressure method, and there is considerable drug upon the market which has very little pressure activity.—J. Am. Pharm. Assoc. 1917, v. 6, p. 715.

van Leeuwen, W. S.: From biological assays of ergot preparations the author concludes that the widespread statement to the effect that these preparations deteriorate rapidly with age and are worthless after one year is not true.—Pharm. Weekblad, 1917, v. 54, p. 509–519.

Scoville, Wilbur L.: Physical appearance rather than therapeutic activity has been the main criterion thus far observed in the making of ergot preparations.—Am. Druggist, 1917, v. 65, No. 1, p. 25.

ERIODICTYON.

Farwell, Oliver Atkins: The correct authority for "*Eriodictyon Californicum* (Hooker and Arnott)" is "Torrey," not "Greene," as given in the Pharmacopœia.—Drug. Circ. 1917, v. 61, p. 174.

Dohme, A. R. L.: Yerba santa should consist of leaves only, but of late collectors are gathering twigs to such an extent that 50 per cent, more or less, of the drug consists of inert stems and twigs.—Proc. N. W. D. A. 1917, p. 514.

EUCALYPTOL.

Ducung and Moreau: Notes on tests for the detection of the adulteration of eucalyptol.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 348–349.

EUCALYPTUS.

Farwell, Oliver Atkins: The specific name "*globulus*" should not be capitalized as in the U. S. P., because it is not a proper name.—Drug. Circ. 1917, v. 61, p. 174.

EUONYMUS, N. F.

Farwell, Oliver Atkins: The proper spelling for the generic name of wahoo is *Euonymus*.—Drug. Circ. 1917, v. 61, p. 230.

EUPHORBIA PILULIFERA, N. F.

Farwell, Oliver Atkins: The proper name for the plant from which this drug is produced is *Euphorbia hirta* Linné; but if considered as a genus distinct from true *Euphorbia*, *Chamaesyce hirta* (Linné) Millspaugh.—Drug. Circ. 1917, v. 61, p. 230.

EXTRACTA.

Beringer, George M.: The introduction of a number of new powdered extracts into the U. S. P. was necessary on account of the popularity of this class of preparations.—Am. J. Pharm. 1917, v. 89, p. 15.

Lyubimenko: The loss of color of extracts of green leaves, when exposed to the action of air and light, is due to a change in the equilibrium between the action of an antioxidase which protects chlorophyll from the influence of light and oxygen, and the action of a peroxidase of the tissues which rapidly destroys chlorophyll.—Repert. pharm. through Giorn. farm. chim. 1917, v. 66, p. 288–289.

Bouvet, M.: The caffein content requirement of the Ph. Fr. V. for kola extract should be reduced to 8 per cent, as none of the commercial samples contain 10 per cent.—Bull. sc. pharmacol. 1917, v. 24, p. 295–297.

EXTRACTUM ACONITI.

Dohme, A. R. L.: The extract of aconite root is of little value, as the alkaloids are apparently hydrolyzed or destroyed in the process of concentration, even if this is carried out in a vacuum apparatus. Physiological tests show that the extract deteriorates rapidly and in two months retains less than 5 per cent of its initial activity.—Proc. Am. Drug Mfg. Assoc. 1917, p. 183.

Sani, Luigi: A discussion of methods for the assay of extract of aconite.—Boll. chim.-farm. 1917, v. 56, p. 497–498.

EXTRACTUM ALOES, N. F.

Madsen, E. H.: From experiments the author concludes that the Ph. Dan. method for the preparation of the extract of aloes is satisfactory. He emphasizes the value of the low temperature used in making the extraction.—Archiv Pharm. Chem. 1917, v. 24, p. 13–18.

EXTRACTUM BELLADONNÆ FOLIORUM.

Rasmussen, H. B.: A note on the application of the silicotungstate method of determining atropine to the analysis of belladonna extracts.—Ber. deutsch. pharm. Gesellsch. 1917, v. 27, p. 193–201, through J. Soc. Chem. Ind. 1917, v. 36, p. 783.

EXTRACTUM CANNABIS.

Dohme, A. R. L.: Cannabis americana is as efficient, although it is not official. Furthermore, there is no standard upon which to base the physiological test. Until these two defects are eliminated, a standard and efficient cannabis extract is not likely to be produced.—Proc. N. W. D. A. 1917, p. 502.

EXTRACTUM CARNIS, N. F.

Wasser, Ernst: A description of a method for the detection and determination of lactic acid in meat extract.—J. Chem. Soc. Lond. 1917, v. 112, No. 2, p. 343.

Faith, E. L.: Five samples of beef extract examined ranged in protein content from 26.85 to 45 per cent; in water content from 14 to 22 per cent; in sodium chloride content from 4 to 9.66 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 311.

EXTRACTUM CINCHONÆ, N. F.

Anon.: Data showing the necessity for using sawdust in the assay of the solid extract of cinchona are given. —Drug. Circ. 1917, v. 61. No. 8, p. 25.

Santí, Luigi: A discussion of methods for the assay of extract of cinchona. The method of E. Marck is described in detail.—Boll. chim.-farm. 1917, v. 56, p. 500.

EXTRACTUM COLOCYNTHIDIS.

Santí, Luigi: A method for the assay of the extract of colocynth is described and discussed. —Boll. chim.-farm. 1917, v. 56, p. 520–521.

EXTRACTUM CONII, N. F.

Santí, Luigi: A description of Kremel's method for the assay of extract of conium; also a reference to the method of Snow.—Boll. chim.-farm. 1917, v. 56, p. 498.

EXTRACTUM ERGOTÆ.

Beringer, George M.: In order to obtain a smooth homogeneous extract, the U. S. P., IX, directs that the oil be removed from the ergot by purified petroleum benzin before the drug is percolated with the alcoholic menstruum. Am. J. Pharm. 1917, v. 89, p. 17.

Santí, Luigi: Keller's method for the estimation of cornutine in the extract of ergot is described. Boll. chim.-farm. 1917, v. 56, p. 519.

EXTRACTUM ERGOTÆ AQUOSUM, N. F.

Rusby, H. H.: An alcoholic extract of ergot is official in the U. S. P., and there is an aqueous extract official in the N. F. If there is an aqueous extract that is fit to be used and is a good thing, why shouldn't it be in both books? -Proc. Am. Drug Mfg. Assoc. 1917, p. 11.

EXTRACTUM FERRI POMATUM, N. F.

Santí, Luigi: A method for the determination of iron in the ferrated extract of apples is described.--Boll. chim.-farm. 1917, v. 56, p. 521.

EXTRACTUM GLYCYRRHIZÆ.

van der Haar, A. W.: In a report on the analyses of chemicals in Holland during the past few years it is stated that much of the extract of licorice is of poor quality, some containing less than 20 per cent of glycyrrhizin and some being rich in asparagin.—Pharm. Weekblad, 1917, v. 54, p. 256.

Santí, Luigi: A method for the determination of the glycyrrhizin in the extract of licorice is described. Boll. chim.-farm. 1917, v. 56, p. 521.

Kreis: A sample of licorice sticks of Italian origin was found to consist of wheat flour, rice flour, glue, and a small amount of licorice juice.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 644.

EXTRACTUM GLYCYRRHIZÆ PURUM.

Beringer, George M.: The purpose of the use of chloroform water in the preparation of the pure extract of glycyrrhiza is to prevent decomposition in the drug and the percolate during warm weather. Am. J. Pharm. 1917, v. 89, p. 17.

EXTRACTUM HYDRASTIS.

Beringer, George M.: The addition of tartaric acid to the menstruum used for percolating hydrastis is for the purpose of aiding in the exhaustion of the drug.—Am. J. Pharm. 1917, v. 89, p. 17.

EXTRACTUM HYOSCYAMI.

Santi, Luigi: A discussion of methods for the assay of extract of hyoscyamus.—Boll. chim. farm. 1917, v. 56, p. 497–498.

Van Itallie, E. L., and Woutman, W. F.: An investigation of the mixture of salts obtained in the preparation of the extract of hyoscyamus.—Pharm. Weekblad. 1917, v. 54, p. 659–661.

EXTRACTUM NUCIS VOMICÆ.

Santi, Luigi: A discussion of methods for the assay of extract of nux vomica.—Boll. chim. farm. 1917, v. 56, p. 499–500.

EXTRACTUM OPII.

Hoanschka, A., and Schmid, J.: Analytical data showing the ash content, alkaloidal content, etc., of a number of different samples of extract of opium.—Arch. pharm. 1916, through Pharm. Weekblad, 1917, v. 54, p. 1027.

Santi, Luigi: A discussion of methods for the assay of extract of opium.—Boll. chim.-farm. 1917, v. 56, p. 498–499.

EXTRACTUM QUASSIÆ, N. F.

Santi, Luigi: A method for the determination of quassin in the extract of quassia is described.—Boll. chim. farm. 1917, v. 56, p. 521.

FERRI CARBONAS SACCHARATUS.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX method for the assay of saccharated ferrous carbonate.—Am. J. Pharm. 1917, v. 89, p. 171.

FERRI CHLORIDUM.

Duncan, William: A discussion of the proper method of compounding a prescription of ferric chloride and sodium salicylate mixture in order to avoid the formation of a precipitate.—Pharm. J. 1917, v. 98, p. 236, 239.

Forster, Aquila, et al.: A study of certain combinations of ferric chloride with ether and with dibenzyl sulphide.—J. Chem. Soc. Lond. 1917, v. 111, p. 809–814.

FERRI SULPHAS.

Pérégrin: An economic method for the manufacture of ferrous and ferric sulphates is described.—Rev. chim. industrielle, 1917, v. 26, p. 182.

FERRUM.

Ruer, R., and Goerens, F.: A study of the polymorphic transformations of pure iron.—Ferrum, v. 13, p. 1–6, through J. Chem. Soc. Lond. 1916, v. 110, part 2, p. 483–484.

Smits, A., and Lobry de Bruyn, C. A.: A new method for the passivification of iron consists in covering iron electrodes sealed into glass tubes with a solution of ferric nitrate.—Proc. Acad. Sci. Amsterdam, 1917, v. 19, p. 880–884, through Chem. Abstr. 1917, v. 11, p. 2993.

Berg, R.: Methods for determining small quantities of iron and aluminum in foods are described. —Chem. Ztg. 1917, v. 41, p. 50–52, through J. Soc. Chem. Ind. 1917, v. 36, p. 231.

Darling, E. R.: A colorimetric method for the rapid determination of iron in salts of antimony is described. The color is formed by means of KCNS.—Chem. Analyst, 1917, v. 20, p. 20–21.

Palkin, Samuel: A description of a method for the separation of aluminum from iron based on the solubility of ferric chloride in ether.—J. Ind. & Eng. Chem. 1917, v. 9, p. 951–953.

FERRUM REDUCTUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not the U. S. P. test for reduced iron needs revision. It is stated that reduced iron is seldom free from sulphides.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

Winkler, L. W.: The quantity of metallic iron in iron reduced by hydrogen may be determined approximately (within 0.5 per cent) by simple ignition in the air. One hundred parts by weight of iron give 142.9 parts of Fe_2O_3. —Ztschr. angew. Chem. 1917, v. 30, part 1, p. 64, through J. Chem. Soc. 1917, v. 112, part 2, p. 511.

Scoville, W. L.: One sample of reduced iron examined contained only 60 per cent of iron.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

FLUIDEXTRACTA.

Buhrer, C.: A discussion of precipitation phenomena in fluid extracts and of the causes producing the same.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 4–7.

Congdon, Leon A.: Drug inspection in Kansas showed the following fluid extracts to be deteriorated in some instances: Fluid extract of stillingia, [illegible], senna, wild cherry, kola, digitalis, pink root, rhubarb, calumba and gentian. Data showing the specific gravity, percentage of solids, and alcohol content of a number of fluid extracts examined are also given.—Proc. Kansas Pharm. Assoc. 1917, p. 88–89.

Dilly, O. C.: Data are given showing the changes which had taken place in a number of fluid extracts prepared by C. Lewis Diehl in the years 1880 and 1881.—Proc. Kentucky Pharm. Assoc. 1917, p. 96–101.

Hommell, P. E.: The fluid extracts of aralia, asclepias, boldo, [illegible], corydalis, [illegible], galega, helianthemum, juglans, and [illegible] should have been omitted from the N. F.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

[illegible]: Analytical data are given showing the specific gravity, percentage of alcohol, solids per 100 cubic centimeters, and alkaloidal content of old fluid extracts of mullein leaves, blue flag, cotton root bark, dogwood, stillingia, [illegible], and guarana.—Rep. Kansas Bd. Health, 1916, v. 12, p. 433.

FLUIDEXTRACTUM ACONITI.

Dohme, A. R. L.: The use of cochineal as an indicator in the estimation of the ether-soluble alkaloids in fluid extract of aconite should be discontinued, as it gives results which are too high. Methyl red is the indicator recommended for use in this assay. The fluid extract deteriorates to some extent within two months.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 181.

FLUIDEXTRACTUM CALUMBÆ, N. F.

Hommell, P. E.: The dose of fluid extract of calumba given in the N. F. is 30 minims. About one dose of this size would be all that any human being could take in one day.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

FLUIDEXTRACTUM CASCARÆ SAGRADÆ AROMATICUM.

Rippetoe, J. R.: This preparation still remains one of the museum specimens. It is no doubt a fair estimate to say that for every 1,000 gallons used not more than 1 is made according to the official formula. Glycerin has no value as a solvent, and as a sweetening agent sugar is better and much cheaper.—Drug. Circ. 1917, v. 61, p. 201; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

FLUIDEXTRACTUM CATARIÆ, N. F.

Hommell, P. E.: The dose of fluid extract of catnip given in the N. F. is 1 fluidrachm. One-quarter or one-half the dose is sufficient.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

FLUIDEXTRACTUM CINCHONÆ.

Beringer, George M.: Hydrochloric acid is added to the menstruum employed in the preparation of the fluid extract of cinchona in order to insure the complete extraction of alkaloids.—Am. J. Pharm. 1917, v. 89, p. 19.

Chick, Oliver: A paper dealing with the preparation of *extractum cinchonæ liquidum*, Ph. Brit. The assay process of the 1898 Ph. Brit. is stated to be more accurate than that of the 1914 edition.—Chem. & Drug. 1917, v. 89, p. 612.

FLUIDEXTRACTUM CONDURANGO, N. F.

Hommell, P. E.: The dose of the fluid extract of condurango given in the N. F. is 1 fluiddrachm. It should be reduced to 30 drops, as few physicians prescribe more.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

FLUIDEXTRACTUM CONII, N. F.

Anon.: The H. K. Mulford Co. reports that sulphuric acid is preferable to acetic acid in the preparation of fluid extract of conium. Coniine is a volatile alkaloid and coniine acetate is also volatile, whereas coniine sulphate produced by the use of sulphuric acid would be stable and therefore yield a better preparation.—Drug. Circ. 1917, v. 61, No. 4, p. 25.

FLUIDEXTRACTUM DIGITALIS.

Beringer, George M.: The alcoholic strength of the menstruum directed to be used in making the fluid extract of digitalis has been increased in order to impart greater stability to the preparation.—Am. J. Pharm. 1917, v. 89, p. 19.

FLUIDEXTRACTUM DULCAMARÆ, N. F.

Hommell, P. E.: Fifteen to 30 drops of fluid extract of dulcamara would be a good average dose, not 1 fluiddrachm, as given in the N. F.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

FLUIDEXTRACTUM ERGOTÆ.

Beringer, George M.: In the directions for the preparation of the luid extract of ergot the revision committee has returned to the ecommendation of Dr. E. R. Squibb, and the Pharmacopœia now pecifies the use of hydrochloric acid in the menstruum used for xhausting the drug.—Am. J. Pharm. 1917, v. 89, p. 19.

Maben, Thomas: Surprise is expressed at the fact that the new dition of the U. S. P. required no physiological test for this prepara-ion, and that no statements concerning the precautions to be ob-erved in its preservation are given.—Chem. & Drug. 1917, No. 1931, . 71.

FLUIDEXTRACTUM FRANGULÆ.

Richter, Ernst: Data showing the yield of extractive matter and emodin content of fluid extract of frangula are presented.—Apoth.-Ztg. 1917, v. 32, p. 65, through Ztschr. angew. Chem. 1917, v. 30, part 2, p. 174.

FLUIDEXTRACTUM HYDRASTIS.

Santi, Luigi: The methods of Beckurts and Schulze and of Herzog for the assay of fluid extract of hydrastis are described in detail. Reference is also made to the work of Heyl and of van der Haar to determine the suitability of these methods.—Boll. chim.-farm. 1917, v. 56, p. 418–419.

FLUIDEXTRACTUM IPECACUANHÆ.

Snyder, J. P.: The new alcohol menstruum of the U. S. P., IX, is not nearly as satisfactory for exhausting ipecac as the menstruum of the U. S. P., VIII; in fact, the former fails to extract but little more than 75 per cent of the alkaloid, and with an expensive drug like ipecac this becomes a very important item.—J. Am. Pharm. Assoc. 1917, v. 6, p. 713.

Beringer, George M.: By the use of a menstruum consisting of diluted hydrochloric acid, alcohol, and water an attempt has been made to produce a fluid extract of ipecac from which a syrup can be made by a simple admixture, instead of by the complicated process directed in the U. S. P., VIII.—Am. J. Pharm. 1917, v. 89, p. 29.

Dohme, A. R. L.: A decided blunder was made by the revision committee in fixing the standard for the fluid extract of ipecac at 2 per cent of alkaloid. If one part of a finished fluid extract is to represent one part of crude drug it is self-evident that you can not obtain a 2 per cent fluid extract from a drug containing only 1.75 per cent of alkaloid.—Proc. N. W. D. A. 1917, p. 504.

Maben, Thomas: Attention is directed to the fact that the U. S. P. requires that the fluid extract must contain not less than 1.8 nor more than 2.2 per cent of alkaloids, whereas the drug is required to yield not less than 1.75 per cent of alkaloids.—Chem. & Drug. 1917, v. 86, No. 1931, p. 71.

Rippetoe, J. R.: Ipecac is required to yield not less than 1.75 per cent of the ether-soluble alkaloids of ipecac. To be consistent the Pharmacopoeia should require that the fluid extract should yield not less than 1.5 nor more than 1.75 grams of ether-soluble alkaloids of ipecac.—Drug. Circ. 1917, v. 61, p. 301–302; J. Am. Pharm. Assoc. 1917, v. 6, p. 404.

Santi, Luigi: A description of Keller's method for the determination of emetine in the fluid extract of ipecac.—Boll. chim.-farm. 1917, v. 56, p. 418.

FLUIDEXTRACTUM KOLÆ, N. F.

Santí, Luigi: A description of a method for the determination of caffeine in the fluid extract of kola nuts.—Boll. chim.-farm. 1917, v. 56, p. 517–518.

FLUIDEXTRACTUM NUCIS VOMICÆ.

Beringer, George M.: By the omission of acetic acid from the menstruum employed in exhausting nux vomica as directed in the U. S. P., IX, a fluid extract is obtained which is less prone to form a precipitate on standing.—Am. J. Pharm. 1917, v. 89, p. 20.

Blosmo, O. J.: Results showing the alkaloidal content of different fractions of the percolate from nux vomica are given. The assays were made according to the U. S. P. method and the methods of LaWall and Sayre.—Proc. Minnesota Pharm. Assoc. 1917, p. 145–150.

FLUIDEXTRACTUM SABAL.

Griebel, C.: Analytical data showing the constituents of fluid extract of saw palmetto.—Chem. Abstr. 1917, v. 11, p. 1152 from Apoth.-Ztg. 1916, v. 31, p. 306.

FLUIDEXTRACTUM SCILLÆ.

Beringer, George M.: The changes in the process for the preparation of fluid extract of squill were made for the purpose of getting rid of the large amounts of gum and sugar, and thereby insuring a more permanent preparation.—Am. J. Pharm. 1917, v. 89, p. 21.

FLUIDEXTRACTUM SENEGÆ.

Beringer, George M.: In the preparation of the fluid extract of senega ammonia water has been substituted for the solution of potassium hydroxide, as the former is superior to the latter in preventing precipitation and gelatinization in the finished product.—Am. J. Pharm. 1917, v. 89, p. 21.

FLUIDEXTRACTUM SENNÆ.

Rippetoe, J. R.: Both of the official varieties of senna should be permitted to be used in all of the official preparations of senna, including the fluid extract.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

FLUIDEXTRACTUM VALERIANÆ, N. F.

Hommell, P. E.: The dose of the fluid extract of valerian is given in the N. F. as 30 minims. One-half of this amount would be sufficient.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

FLUIDGLYCERATA, N. F.

Brown, L. A.: Fluid glycerates are a new class of preparations, in the N. F., IV, and contain 50 per cent of glycerin in place of alcohol, each mil being made to represent 1 gram of the drug. The fluid glycerates of cascara sagrada, aromatic cascara sagrada, glycyrrhiza, krameria, and rhubarb are official.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 38.

Smith, F. A. Upsher: Fluid glycerates are a newly introduced class of preparations due largely to the labors of Beringer in this country and Martindale in England. They are made with glycerin and water, and are usually miscible with water.—Proc. Minnesota Pharm. Assoc. 1917, p. 172.

FOENICULUM.

Farwell, Oliver Atkins: The correct name for the source of this drug is *Foeniculum Foeniculum* (Linné) Karsten.—Drug. Circ. 1917, v. 61, p. 174.

Rusby, H. H.: A great amount of fennel of poor quality has arrived during the past year and has found its way into the manufacture of veterinary remedies.—J. Am. Pharm. Assoc. 1917, v. 6, p. [illegible].

Roberts, J. G.: One rejected sample of fennel seed contained 2.4 per cent of stems and foreign seeds, 13.7 per cent of small stones, and 0.0014 per cent of fecal matter. The ash yield was 27.4 per cent, which is more than three times as much as the U. S. P. standard of 9 per cent.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

FRANGULA.

Beal, George D., and Okey, Ruth: A description of a method for the qualitative identification of the drugs containing emodin.—J. Am. Chem. Soc. 1917, v. 39, p. 716-725.

GALEGA. N. F.

[illegible], Marion, and Carlson, A. J.: From experiments on dogs and goats it is concluded that *Galega officinalis* has no beneficial effect on lactation.—J. Am. M. Assoc. 1917, v. 68, p. 1570-1572.

GALLA.

Anon.: Secretary of Commerce Redfield has announced that new sources of oak galls have recently been found near the Baird fishery station in California.—Pharm. Era, 1917, v. 50, p. 179.

Roberts, J. G.: In three samples of galls examined the following amounts of [illegible] were found: Chinese, [illegible] per cent; Aleppo, 58.1 per cent; and Morea, 51 per cent.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

GAMBIR.

Roberts, J. G.: One lot of gambir examined was rejected because it was in a pasty condition, instead of dry, as required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

GELATINUM.

Schwerin, B.: U. S. patent No. 1235064 describes an electro-osmotic method for the purification of gelatin. -Chem. Abstr. 1917, v. 11, p. 2625.

Biltz, W., et al.: Data relative to the molecular size of gelatin as shown by osmotic pressure determinations are presented.- -Ztschr. physik. Chem. 1916, v. 91, p. 705–712, through J. Soc. Chem. Ind. 1917, v. 26, p. 297.

Rakuzin, M. A., and Braudo, Ek. Maks.: Researches on the optical rotation of alkali glutinates. The chemistry of α- and β-gelatin. – J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 269–272, through Chem. Abstr. 1917, v. 11, p. 582.

Dohme, A. R. L.: Several samples of gelatin examined contained an excess of arsenic and ash.—Proc. N. W. D. A. 1917, p. 506.

Lea, E. J.: The majority of eight samples of gelatin examined contained excessive glue, arsenic, or zinc. Bull. California Bd. Health, 1917, v. 13, p. 236.

McGill, A.: A report of analytical data obtained in the examination of 137 samples of gelatin.—Bull. Lab. Inl. Rev. Dept. Canada, 1917, No. 367, p. 4.

Anon.: Notice of judgment No. 4524 relates to the adulteration of gelatin.—S. R. A.-Chem. 1917, p. 38.

Choay, E.: A discussion of the method of preparation and the properties of tannate of gelatin.—J. pharm. et chim. 1917, v. 16, p. 137–139.

GELSEMIUM.

Farwell, Oliver Atkins: The proper authority for the binomial "*Gelsemium sempervirens* (Linné)" is "Persoon," not "Aiton filius."—Drug. Circ. 1917, v. 61, p. 174.

Scoville, Wilbur L.: Manufacturers are already standardizing gelsemium and its preparations by assay, but no assay for this purpose has been included in the Pharmacopœia to date.—Am. Druggist, 1917, v. 65, No. 1, p. 26.

Dohme, A. R. L.: One lot of gelsemium root examined did not comply with the U. S. P. description in that they were entirely too large.—Proc. N. W. D. A. 1917, p. 520.

Roberts, J. G.: The only lot of gelsemium root examined contained 0.25 per cent of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

GENTIANA.

Tunmann, O.: A note on the occurrence of *Picea excelsa* as an adulterant of powdered gentian.—Apoth.-Ztg. 1917, p. 181, through Pharm. Weekblad, 1917, v. 54, p. 1427.

GLUCOSUM.

Burmann, James: A description of a rapid and accurate method for the quantitative determination of glucose.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 196-199.

Cowie, W. B.: Notes on the effect of using commercial glucose in certain pharmaceutical preparations. The bad effects are stated to be due to the SO_2 contained in commercial glucose.—Pharm. J. 1917, v. 98, p. 235-236.

Kling, André: For the detection and estimation of arsenic in commercial glucose, the Marsh, Gutzeit, and diaphanometric (turbidity obtained with sodium hypophosphite in sulphuric acid solution) methods are equally trustworthy.—Ann. Falsif. 1917, v. 10, p. 438-450.

GLYCERINUM.

Wolff, Hans: The use of the refractometer for differentiating between glycerol and ethylene glycol is recommended. The refractometer number of ethylene glycol is less than 15, while that of glycerol is more than 77.—Chem. Ztg. 1917, v. 41, p. 608-609, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 512-523.

Briggs, C. H.: A description of a method for the quantitative determination of glycerin in pharmaceutical preparations. The glycerin is recovered by distillation and weighed in the anhydrous state.—Rev. farm. 1916, No. 8, through Ann. Falsif. 1917, v. 10, p. 250.

[illegible], K.: Brief descriptions of methods which have been employed for the estimation of glycerol. The descriptions include physical methods (distillation, refraction, specific gravity, vapor pressure, etc.), oxidation methods (with permanganate or dichromate), esterification methods (acetin, acetic anhydride), and other methods such as those in which the glycerol is weighed as glyceryl nitrate or sodium glycerinate.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 197-200, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 547.

Neumann, R.: A report on the estimation of glycerol by the iodide method, using small quantities of hydriodic acid (semimicro-iodide method). The author finds that the method yields trustworthy results when only about one-tenth of the usual quantities of sample and reagents are employed.—Ztschr. angew. Chem. 1917, v. 30, p. [illegible], through J. Chem. Soc. Lond., 1918, v. 114, part 2, p. 31.

Little, Ernest and [illegible]: A description of a modified dichromate method for the quantitative determination of glycerin.—Am. Perf. 1917, v. 12, p. 281-282.

Lyons, A. B.: Attention is called to an error in F. P. Bradt's method for the quantitative determination of glycerin as published in the J. Am. Pharm. Assoc., January 1916.—J. Am. Pharm. Assoc., 1917, v. 6, p. 807-808.

Montgomery, Douglass W.: A short review of the uses of glycerin in preparations intended for external medication.—Critic and Guide, 1917, v. 20, p. 456–458.

Flarity, James: A report of an incompatibility in a prescription containing, among other ingredients, solution of hydrogen dioxide and glycerin. The hydrogen dioxide reacts with the glycerin, forming oxalic acid.—Proc. Wisconsin Pharm. Assoc. 1917, p. 113.

Patch, E. L.: One lot of glycerin examined contained a minute trace of arsenic; another lot had a specific gravity of only 1.247.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

Baird, R. O.: Of 24 samples of glycerin examined, only two were below the U. S. P. standard.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 389.

McGill, A.: Of 230 samples of glycerin examined, 36 were below standard.—Bull. Lab. Inl. Rev. Canada, 1917, No. 370, p. 3.

Engelhardt, H.: A list of German substitutes for glycerin, with directions for preparing the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 57.

Alther: A note on the composition of "glyzerite," a substitute for glycerin.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 225–226.

Anon.: Descriptions of a number of glycerin substitutes.—Pharm. Ztg. 1917, v. 62, p. 61, 99, and 105, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 175.

Dinkler and Schaumann: A discussion of experiments to determine to what extent perkaglycerol can be used pharmaceutically in place of glycerin.—Pharm. Ztg. 1916, v. 61, p. 503, through Chem. Abstr. 1917, v. 11, p. 1720.

Lennox, J.: A description of an efficient substitute for glycerin prepared from Irish moss.—Pharm. J. 1917, v. 98, p. 186.

GLYCERITA.

Asher, Philip: The U. S. P. should prescribe assay methods for the glycerites of boroglycerine and tannin.—Am. J. Pharm. 1917, v. 89, p. 174.

GLYCYRRHIZA.

Farwell, Oliver Atkins: The designation *Glycyrrhiza glabra* Linné is sufficient to indicate the source for Spanish licorice. "(Waldstein et Kitaibel)" should be inserted between "*glandulifera*" and "Regal et Herder" in order to make the author's citation perfect.—Drug. Circ. 1917, v. 61, p. 174.

Anon.: Statistics showing the amount of licorice root and paste shipped into the United States from Spain during the years 1914 to 1916 are given.—Oil, Paint & Drug Rep., 1917, v. 91, No. 22, p. 72.

Anon.: According to the Weekly Bulletin, Canadian Department of Trade and Commerce, Russia supplies practically the whole of the world's consumption of licorice. The exports of licorice from Russia in 1913 amounted to 62,209,677 pounds, of which 60,349,447 pounds went to the United States.—Com. Rep. 1917, No. 126, p. 804–805.

Hurst, Carl B.: Spanish customhouse management gives the following quantities of licorice in metric tons exported to all countries during the first 11 months of 1916. Total of 3,052 tons of licorice root and 5,048 tons of licorice extract and paste.—Com. Rep. 1917, No. 108, p. 516.

Linz, A.: A comparison of methods for the estimation of glycyrrhizin in licorice root and in *Succus Liquiritiae*. Twenty-seven different methods were investigated and a new method described. A tabulated list of the literature on the subject from 1808 to 1913 is appended.—Arch. Pharm. 1916, v. 254, p. 65–134 and 204–224, through Analyst, 1917, v. 42, p. 359.

Dohme, A. R. L.: Many samples of licorice root examined contained large tasteless and dirty roots. Even a sample of licorice peelings, a by-product in the manufacture of peeled licorice, was offered as Spanish licorice root.—Proc. N. W. D. A. 1917, p. 513, 520.

Roberts, J. G.: Two shipments of licorice root received contained a very large proportion of moist roots.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

GOSSYPII CORTEX, N. F.

Farwell, Oliver Atkins: In *Gossypium Barbadense* Linné, the specific name, a geographical one, is capitalized, as it should be; but this is an oversight of the proof reader, as the intention was to decapitalize all such names. They should be recapitalized.—Drug. Circ. 1917, v. 61, p. 230.

GOSSYPIUM PURIFICATUM.

Lahache: A discussion of methods for the evaluation of cotton intended for use in the preparation of bandages and surgical dressings. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 164–169, 197–200.

GRANATUM.

Hess, K., and Eichel, A.: Researches on the chemical constitution of the alkaloids of pomegranate.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 368, 1192, and 1386, through Pharm. Weekblad, 1917, v. 54, p. 1456–1458.

GRINDELIA.

Penick, S. B.: Grindelia is described in the U. S. P. as "the dried leaves and flowering tops of *Grindelia camporum* Greene, or *Grindelia cuneifolia* Nuttall or *Grindelia squarrosa* (Pursh) Dunal without the presence or admixture of more than 10 per cent of stems or other foreign matter." In the flowering tops there must be some stem.

which would possibly be 10 per cent of the total, so that no more stem can be present if the drug strictly conforms to requirements. None of this drug will, therefore, be found on the market within 50 per cent of the U. S. P. requirements.—J. Am. Pharm. Assoc. 1917, v. 6, p. 696.

GUAIACOL.

Palet, Luciano P. J.: Notes on the use of enzymes for the differentiation of guaiacol and creosote. Dilute alcoholic solutions of guaiacol treated with an oxidase give a yellow color, which gradually changes to orange. Under the same conditions, dilute solutions of beech creosote give a light violet color after one-half hour.—Anales soc. quim. Argentina, 1917, v. 5, p. 305–307.

Roberts, J. G.: One lot of guaiacol examined contained oily hydrocarbons and other impurities.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

Menciére, Louis: Notes on the physiological properties of guaiacol and benzoic acid, and on the use of these substances in medicine and surgery.—Compt. rend. acad. sc. 1917, v. 165, p. 1023–1025.

GUAIACUM.

Dohme, A. R. L.: Samples of guaiac examined varied from 75.6 per cent to 91.6 per cent in alcohol-soluble material.—Proc. N. W. D. A. 1917, p. 509, 515.

Scoville, W. L.: Of three samples of guaiac examined, one was worthless, one contained 63.4 per cent of resin soluble in alcohol, and four contained from 80 to 91.25 per cent of alcohol-soluble resin.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

GUARANA.

Scoville, W. L.: A sample of guarana examined assayed 4.32 per cent of caffeine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

HELONIAS, N. F.

Moser, John: A descriptive article on the pharmacognosy of helonias, with a number of illustrations, including photographs of the several types of helonias rhizome and cross sections thereof.—Am. J. Pharm. 1917, v. 89, p. 291–296.

HEXAMETHYLENAMINA.

Markessen: A description of a method for the preparation of hexamethylentetramine by the pharmacist.—Farmacevtisk Revy, 1916, No. 11, p. 190, through Schweiz, Apoth.—Ztg. 1917, v. 55, p. 227.

Carles, P.: Reactions for the identification of urotropine are described.—Ann. chim. analyt, 1917, v. 22, p. 8–9.

Cazzani, Ugo: Notes on hexamethylenamine; tests for identity and impurities, quantitative determination, incompatibilities, etc.—Boll. chim.-farm. 1917, v. 56, p. 164–165.

Howell, E. V., and Keyser, E. V.: A general discussion of the chemical properties and therapeutic uses of hexamethylenamine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 445–451.

Vivario, R., and Wagenaar, M.: Descriptions of crystalline derivatives formed by urotropin with metallic salts, with a summary of the literature. The application of this data to microchemical methods is discussed.—Pharm. Weekblad. 1917, v. [illegible], p. [illegible].

Lemeur, A.: A description of the method of preparation and the properties of hexamethylene peroxide of hydrogen, a compound obtained by the action of hydrogen peroxide upon hexamethylenamine.—J. pharm. et chim. 1917, v. 15, p. 222–229.

Remele: A report of researches dealing with the passage of urotropine into the aqueous humor and the separation of formaldehyde which occurs thereon.—Chem. Abstr. 1917, v. 11, p. [illegible].

HUMULUS.

Salmon, E. S.: A detailed account of hop-breeding experiments conducted at Wye College, Kent.—J. Inst. Brewing, 1917, v. 23, p. 60–82, through Chem. Abstr. 1917, v. 11, p. 1878.

Benjamin, G. H.: U. S. patent No. [illegible] described the drying of hops by means of air heated to 50° C. for 1 to 2 hours, then 66–77° C. for 2 to 5 hours, and finally at 77° C. for 30 to 60 minutes.—Chem. Abstr. 1917, v. 11, p. 2257.

Anon.: Recent investigations by specialists of the United States Department of Agriculture, reported in bulletin [illegible], established the fact that the use of impure sulphur in bleaching hops is the source of the arsenic with which they are sometimes contaminated.—Oil, Paint & Drug Rep. 1917, v. 92, No. 12, p. 50K.

HYDRARGYRI CHLORIDUM CORROSIVUM.

Marden, J. W., and Dover, Mary V.: Data relative to the solubility of mercuric chloride in chloroform-ether, acetone-benzene, and ethyl acetate-benzene mixtures are presented.—J. Am. Chem. Soc. 1917, v. [illegible], p. [illegible].

Adanti, Giulio: A volumetric method for the determination of mercury salts, and its application to the testing of mercuric chloride compresses is described.—Boll. chim. farm. 1916, v. [illegible], p. [illegible].

[illegible]: Histological descriptions of changes in the kidneys in poisoning by mercuric chloride, potassium dichromate, and cantharides.—Arch. sci. med. 1917, v. 40, p. 125–127.

[illegible], Albert E., and Hadley, R. V.: Descriptions of the histological changes produced in the lungs and livers of guinea pigs and rabbits by certain homeopathic remedies, including a saturated aqueous solution of mercuric chloride.—J. Am. Inst. Homeopathy, 1917, v. 9, p. 897–900.

Anon.: An editorial dealing with the growing frequency of mercurial poisoning.—J. Am. M. Assoc. 1917, v. 68, p. 1987–1988.

DeM. Sajous, Louis: A discussion of methods for the treatment of acute mercuric chloride poisoning.—New York, M. J. 1917, v. 106, p. 1146–1147, 1192–1193, 1234–1235.

Anon.: An editorial discussing the modern treatment of mercurial poisoning.—J. Am. M. Assoc. 1917, v. 68, p. 120–121.

Brown, George E., and Baskett, L. W.: A report of a case of mercuric chloride poisoning with special reference to the employment of the Lambert treatment.—J. Am. M. Assoc. 1917, v. 68, p. 1622.

Burmeister, W. H., and McNally, W. D.: Acute mercury poisoning. A parallel histological and chemical study of the renal hepatic tissue changes as compared with the rapidity of absorption and the amount of mercury present in the circulating blood at the time such changes occur.—J. Med. Res. 1917, v. 36, p. 87–98.

Fantus, Bernard, and Hyatt, Emry G.: A second communication on the value of phosphite and hypophosphite combinations as antidotes in mercuric chloride poisoning.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 812–818.

Linhart, G. A., and Adams, E. Q.: An explanation of the reduction of mercuric chloride by phosphorus acid.—J. Am. Chem. Soc. 1917, v. 39, p. 948–950.

Hall: The following is recommended as an antidote for poisoning with mercuric chloride: Potassium iodide, 0.5 gram; quinine hydrochloride, 0.3 gram; and water, 125 grams. -Pharm. Post, 1916, p. 729, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 419.

Wilms, J. H.: Notes on calcium sulphide as a chemical and clinical antidote for mercuric chloride poisoning, with experiments and case reports.—J. Lab. & Clin. Med., 1916–1917, v. 2, p. 445–458.

Haskell, C. C., and Courtney, R. H.: An investigation of the value of intravenous injections of solutions of calcium sulphide in the treatment of poisoning by mercuric chloride. It is concluded that the injection of calcium sulphide is dangerous, and that death may be hastened rather than retarded by this procedure.—J. Lab. & Clin. Med. 1917, v. 3, p. 110–114.

Linhart, G. A.: A method for the preparation of pure sodium phosphate for use as an antidote for mercuric chloride poisoning is described in detail.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 722–725.

Weiss, H. B.: A description of a method for the treatment of mercuric chloride poisoning in which alkali hypertonic salts are given by mouth, by rectum, and intravenously.—J. Am. M. Assoc. 1917, v. 68, p. 1618–1620.

Fantoni, A.: A report on the use of intravenous injections of small amounts of mercuric chloride for the treatment of acute rheumatism. Year-Book of Pharmacy, 1917, p. 186.

HYDRARGYRI CHLORIDUM MITE.

Asher, Philip: An explanation of the chemistry of the U. S. P. method for the assay of mercurous chloride. Am. J. Pharm. 1917, v. 89, p. 169.

Guthrie, C. P.: The HgCl content of 18 samples of calomel tested varied from 95.34 per cent to 99.77 per cent. The U. S. P. requires not less than 99.6 per cent. Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 357.

HYDRARGYRI IODIDUM RUBRUM.

Franceschi, G. B. A note on the action of hydrogen sulphide upon mercuric iodide in alcoholic mixtures. When a small amount of hydrogen sulphide is employed the compound formed has the formula $HgS.HgI_2$. If an excess of hydrogen sulphide is present, HgS is formed. An abstract. Giorn. farm. chim. 1917, v. 66, p. 104-105.

Smits, A. An investigation of the system, mercury iodide. Red mercuric iodide is transformed into the yellow modification at 127° C. When this is heated further it remains yellow up to 190°, and then assumes a red tint, which deepens, until the substance melts, to a dark red liquid at 255.5°. Proc. K. Akad. Wetensch. Amsterdam, 1917, v. 19, p. 703-708, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 174.

Tammann, G. A colorless modification of mercuric iodide is obtained if mercuric iodide is heated at about 300 to 500° C. in a long glass tube, one end of which is connected to a receiver, in which the pressure can suddenly be decreased from 1 to one-tenth atmosphere. The iodide condenses in the form of a colorless snow, which becomes pink in a few seconds and red after some minutes. Chem. Zentralbl. 1917, v. 1, p. 1065, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 474.

HYDRARGYRI OXIDUM FLAVUM.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of mercuric oxide. Am. J. Pharm. 1917, v. 89, p. 171.

HYDRARGYRI SALICYLAS.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of mercury salicylate. Am. J. Pharm. 1917, v. 89, p. 169.

Lajoux, H.: The quantitative determination of mercury in the basic salicylate of mercury and its isomers. The mercury is either weighed as the sulphide or determined according to the cyanometric method of Denigès. -J. pharm. et chim. 1917, v. 15, p. 241–246; Ann. chim. analyt. 1917, v. 22, p. 114.

Lascoff, J. Leon: A discussion of the modes of compounding or preparing prescriptions containing mercuric salicylates.—J. Am. Pharm. Assoc. 1917, v. 6, p. 143–145.

HYDRARGYRUM.

Anon.: The production of mercury in California during 1916 amounted to 21,400 flasks of 75 pounds each.—Chem. & Drug. 1917, v. 89, p. 662.

Anon.: Data relative to the production of mercury in Spain for the years 1911 to 1915 are given. In 1915 the production amounted to 20,717 tons.—Chem. & Drug. 1917, v. 89, p. 765.

Patten, Harrison E., and Mains, Gerald H.: An illustrated description of an apparatus for the purification of mercury. -J. Ind. & Eng. Chem. 1917, v. 9, p. 600–603.

Dunnicliffe, Horace B.: An illustrated description of the arrangement of apparatus for the purification of mercury intended for the filling of barometers.—Chem. News, 1917, v. 116, p. 41–42.

Wilhelm, R. M.: Data relative to the freezing point of mercury are presented and discussed. Samples of mercury purified according to three different methods were used in the experiments. One of the samples was purified to meet the requirements of the U. S. P.—Bur. Standards Sci. Paper, 1916, No. 204, p. 655-661.

Skanpy, Franz: An experimental study to determine the specific heat of liquid mercury.—Ber. deutsch. physik. Ges. 1916, v. 18, p. 302–307, through Chem. Abstr. 1917, v. 11, p. 2851.

Egerton, A. C.: Data are presented relative to the vapor pressure of mercury determined by a method based on that of Knudsen.—Phil. Mag. 1917, v. 33, p. 33–48.

Wastenson, Hugo: A method for determining mercury in pharmaceutical preparations is described. This method is stated to give excellent results as compared with the methods prescribed in the Ph. Svec. and Ph. Germ.—Svensk farm. Tidskr. 1917, v. 21, p. 54–59; Pharm. Post, 1917, v. 50, p. 125–126; J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 509.

Rupp, E., and Herrmann, A.: A report of investigations to determine the constitution and properties of sozoiodo-mercury compounds.—Arch. Pharm. 1916, v. 254, p. 488–497, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 516.

Herrmann, A.: A description of a simple method for estimating the mercury in sozoiodol-mercury preparations is given.—Arch. Pharm. 1916, v. 254, p. 498–500, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 399.

Lomholt, Svend, and Christiansen, J. A.: A method for the estimation of small amounts of mercury in organic substances is described in detail.—Biochem. Ztschr. 1917, v. 81, p. 356-379, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 424.

Marsh, J. E., and Lye, O. G.: A description of a method for the quantitative estimation of mercury in organic compounds. The process described is a modification of the method of estimating mercury by combustion with lime.—Analyst, 1917, v. 42, p. 84.

Spica, C. L.: For the purpose of obtaining information relative to the detection of mercury in toxicological cases, a series of experiments were conducted to determine whether mercuric chloride and calomel undergo material change when kept in contact with visceral material preserved with alcohol.—Gazz. chim. ital. 1917, v. 47, p. 139-144; Boll. chim.-farm. 1917, v. 56, p. 437-440.

Elliott, J. A.: Experimental details for the detection of small quantities of mercury in tissues and body fluids by a modified Reinsch method are described.—J. Am. M. Assoc. 1917, v. 68, p. 1693-1694.

Browning, K. C.: A description of an electrolytic method for the toxicological detection of traces of mercury.—J. Chem. Soc. Lond. 1917, v. 111, p. 236.

Engelhardt, H.: Several lots of mercury were rejected because they contained a large portion of amalgams of other metals.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Dohme, A. R. L.: Several lots of mercury containing amalgam were examined and rejected.—Proc. N. W. D. A. 1917, p. 506.

Wile, Udo J., and Elliott, Joseph A.: An investigation of the mode of action of mercury when administered by injection.—J. Am. Pharm. Assoc. 1917, v. 68, p. 1024.

François, Maurice: Notes on the preparation of mercuric lactate and on the stability of the same in aqueous solutions.—J. pharm. et chim. 1917, v. 15, p. 33-41; Farm. Españ. 1917, v. 49, p. 102-104, 119-120.

Schamberg, J. F., et al.: A study of various organo mercury compounds to determine their value as chemotherapeutic agents.—Am. J. Syphilis, 1917, v. 1, p. 1.

Fabbrini, G.: Notes on precautions to be observed in the preparation of gray oil for injection. A modified military formula for making this preparation is also described.—Repert. pharm. 1917, v. 28, p. 97-102.

HYDRARGYRUM CUM CRETA.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association suggests 33⅓ per cent Hg in mercury with chalk instead of 38 per cent, as it is thought that the percentage of mercury is too high, it being difficult to triturate.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

HYDRASTIS.

Dohme, A. R. L.: Golden seal has frequently been substituted by twin leaf root. In a few cases xanthorrhiza was offered as golden seal.—Proc. N. W. D. A. 1917, p. 520.

Anon.: A note on the cultivation of hydrastis in Austria states that the experiments in acclimatization have been successful and that the alkaloidal content of the drug obtained is even greater than that grown in America.—Pharm. J. Lond. 1917, v. 99, p. 29.

Anon.: The hydrastine content of nine samples of hydrastis assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Congdon, Leon A.: Of 23 samples of hydrastis examined between 1905 and 1917 only four were legal or came strictly up to the requirements, making a percentage of 17.39 per cent legal and 82.61 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Dohme, A. R. L.: Four samples of hydrastis examined assayed 5.5 per cent, 3.2 per cent, 2.68 per cent, and 2.53 per cent of ether-soluble alkaloid.—Proc. N. W. D. A. 1917, p. 509.

Roberts, J. G.: The only lot of hydrastis examined contained 2.65 per cent of ether-soluble alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

Sayre et al.: The alkaloidal content of five samples of powdered hydrastis assayed was 2.42, 2.48, 2.55, 2.56, and 2.99 per cent, respectively.—Rep. Kansas Bd. Health, 1917, v. 13, p. 172 and 263.

Scoville, W. L.: Five samples of hydrastis examined showed a hydrastine content ranging from 2.23 to 3.7 per cent. One sample assayed 5.5 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

HYOSCYAMUS.

Roberts, J. G.: A mixture of foreign leaves, pods, and large stems was offered as henbane. -Proc. Pennsylvania Pharm. Assoc. 1917, p. 86.

Sayre et al.: One sample of powdered hyoscyamus examined was adulterated with *Hyoscyamas muticus*.—Rep. Kansas Bd. Health, 1917, v. 13, p. 264.

Alsberg, C. L.: It is the opinion of the Bureau of Chemistry that *Hyoscyamus muticus* can not be used in any of the preparations official in the U. S. P., as it differs from *Hyoscyamus niger*, in that it contains a liquid base not present in the former and does not contain scopolamine.—S. R. A.-Chem. 1917, No. 19, p. 51.

Anon.: A sample of *Hyoscyamus muticus* examined in the H. K. Mulford laboratories was found to contain 0.7 per cent of alkaloids. Physiological tests, however, demonstrated that the alkaloids extracted from this drug had practically no mydriatic effect.—Drug. Circ. 1917, v. 61, No. 3, p. 25.

Anon.: A sample of *Hyoscyamus muticus* consisting of stems, leaves, and calyces was found to contain 10.94 per cent of moisture and 0.64 per cent of total alkaloids.—Bull. Imp. Inst. 1917, v. 15, p. 325–326.

Dohme, A. R. L.: One sample of hyoscyamus root which was examined assayed 0.44 per cent of mydriatic alkaloids. It was very likely the root of *Hyoscyamus muticus*. Proc. N. W. D. A. 1917, p. 509.

Ewe, G. E.: One lot of *Hyoscyamus muticus* examined assayed 0.728 per cent of alkaloids, which, however, appeared not to be true mydriatic solanaceous alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

Anon.: Of seven samples of henbane assayed, the alkaloidal content of six was above standard and one below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L.: Two out of nine shipments of henbane were rejected because of their low alkaloidal content.—Proc. N. W. D. A. 1917, p. 508.

Engelhardt, H.: Of 24 samples of hyoscyamus examined, 15 were rejected for being low in alkaloidal content. The other 5 assayed from 0.08 to 0.12 per cent of alkaloids.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

Patch, E. L.: The alkaloidal content of nine samples of hyoscyamus examined ranged from 0.017 to 0.0867 per cent. Eight of the samples were below the U. S. P. standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

HYPOPHYSIS SICCA.

Guggenheim, M.: A reply to Fühner's criticism of the author's work on the active principle of the pituitary gland. Biochem. Ztschr. 1917, v. 81, p. 274–277, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 526.

Hamilton, Herbert C.: The U. S. P. test for pituitary body is criticized because of the following features: (1) The inaccurate and unsatisfactory character of the method. (2) The standard, which is not adapted to measuring blood pressure activity, is not a practical oxytocic agent in therapeutics and is not derived from the pituitary gland. (3) The activity of the standard product.—Am. J. Pharm. 1917, v. 89, p. 61–71.

Adams, H. S.: Notes on the use of the pituitary body in therapeutics.—Am. J. Pharm. 1917, v. 89, p. 135–137.

Robertson, T. B.: U. S. patent No. 1218472. A method for the manufacture of medicinal preparations from pituitary glands.—Chem. Abstr. 1917, v. 11, p. 1531.

For further references on the standardization of pituitary preparations see under "Liquor Hypophysis."

ICHTHYOL (NONOFFICIAL).

Anon.: Notes on the derivation of the name "ichthyol" and on the history of ichthyol. An abstract.—Chem. & Drug. 1917, v. 89, p. 210.

Scheibler, H.: Notes on the chemical constituents of sulphur-containing bituminous oils, ichthyol oils.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2595–2600, through J. Soc. Chem. Ind. 1917, v. 36, p. 285.

Dohme, A. R. L.: Substitutes for ichthyol are being offered, most of which are satisfactory.—Proc. N. W. D. A. 1917, p. 509.

Méran, L.: A note on "saurol," a substitute for ichthyol, obtained by distilling a bituminous shale found in a mine near Lake Lugano, Switzerland.—Pharm. J. 1917, v. 98, p. 43.

IGNATIA, N. F.

Roberts, J. G.: In three lots of ignatia examined, 2.72, 2.73, and 3.05 per cent of alkaloids were found.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 86.

INFUSUM DIGITALIS.

Beringer, George M.: The advisability of the omission of alcohol in the preparation of the infusion of digitalis as directed in the U. S. P. IX, is questioned. The new formula is said to yield a preparation which is less stable than that of the U. S. P. VIII.—Am. J. Pharm. 1917, v. 89, p. 351.

Lascoff, J. Leon: A physician when prescribing the infusion of digitalis expects that a freshly prepared infusion will be dispensed. The omission of alcohol in the U. S. P. IX, formula for this preparation is therefore commendable, as it will discourage the pharmacist from keeping the same on hand.—Am. Druggist, 1917, v. 65, No. 5, p. 25.

Toplis, William G.: A description of a method for preparing a permanent infusion of digitalis.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 186.

INFUSUM SENNÆ COMPOSITUM.

Broeksmit, T. C. N.: Notes on the preparation of compound infusion of senna and on the determination of its calcium and magnesium content.—Pharm. Weekbl. 1917, v. 54, p. 1369–1371.

INUNCTA.

Beringer, George M.: The title "inunctum" has been introduced by the N. F., IV, for hydrous wool-fat ointments which are intended to be rubbed in.—Proc. New Jersey Pharm. Assoc. 1917, p. 92.

IODOFORMUM.

Chiarle: Data are presented showing the solubility of iodoform in glycerin. At 15° C. it is stated to be soluble to the extent of 0.123 per cent.—Giorn. farm. chim. 1917, v. 66, p. 94–96.

Massol and Faucon: A report of a study dealing with the absorption of ultraviolet rays by iodine derivatives of methane in alcoholic solution.—Bull. soc. chim. France, 1917, v. 21, p. 207–211.

Hamer, W.: A solution of 10 parts of iodoform in 100 parts of acetone to which 5 drops of ammonia water have been added is stated to be an excellent styptic and antiseptic.—Pharm. Weekblad, 1917, v. 54, p. 164.

Thompson and Snyder: A method for assaying iodoform gauze, which does not require distillation, is described in detail.—J. Am. Pharm. Assoc. 1917, v. 6, p. 18.

IODUM.

Winkler, L. W.: Data relative to the iodine content of sea water are presented.—Ztschr. angew. Chem. 1916, v. 29, p. 205, through Pharm. Weekblad, 1917, v. 54, p. 217.

Weibull, M.: A note on the iodine content of seaweeds growing along the coasts of Sweden.—Apoth. Ztg. 1917, p. 168, through Pharm. Weekblad, 1917, v. 54, p. 1426–1427.

Okuda, T., and Eto, T.: A report of investigations to determine the form of iodine in marine algae.—J. Coll. Agric. Tokyo, 1916, v. 5, p. 341, through J. Soc. Chem. Ind. 1917, v. 36, p. 502.

DeJong, M.: The recovery of iodine from the urine of patients receiving iodides is recommended as a commercial venture for hospitals.—Pharm. Weekblad, 1917, v. 54, p. 77–79.

Guichard, Marcel: A description of a method for determining the atomic weight of iodine by the analysis of iodic acid anhydride. The atomic weight found by this method is given as 126.915.—Bull. soc. chim. France, 1917, v. 23, p. 56–63.

Hildebrand, Joel H., et al.: Data relative to the solubilities of anthracene, anthraquinone, paradibromobenzene, phenanthrene and iodine in various solvents are presented.—J. Am. Chem. Soc. 1917, v. 39, p. 2301–2302.

Thompson and Snyder: Methods for the assay of various iodine compounds and iodine preparations used in pharmacy are described. Methods are given for tincture of iodine, iodoform gauze, iodized oils, and iodine ointment.—J. Am. Pharm. Assoc. 1917, v. 6, p. 18–20.

Kempf, Richard: Notes on the titration of iodine with thiosulphate. Attention is directed to the importance of avoiding the use of an excess of mineral acids in iodine solutions which are titrated with thiosulphate solution.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 71–72, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 502.

van Os, D.: Researches on the quantitative determination of iodine in mineral waters and in thyroid gland. –Pharm. Weekblad, 1917, v. 54, p. 350–353.

Bougault, J.: A study of the action of iodine on the alkalies. –Compt. rend. acad. sc. 1917, v. 164, p. 949–951.

Borrutan, H.: A report of researches to determine the therapeutic activity of iodine. –Physiol. Abstr. 1917, v. 2, p. 360.

Sollmann, T.: A report of investigations to determine the fate of iodine, iodides, and iodates in the body. –J. Pharmacol. 1917, v. 9, p. 269–278.

Baradulin, G. I.: A report on the employment of iodine vapor in the treatment of tuberculosis of the bladder. –Russky Vrach. 1917, v. 16, p. 60, through J. Am. M. Assoc. 1917, v. 68, p. 1671.

Cozin, M. H.: A note calls attention to the harmful effects produced by the use of iodine in the treatment of pyorrhea. –Pharm. J. Lond. 1917, v. 98, p. 365.

IPECACUANHA.

Farwell, Oliver Atkins: The proper combinations to designate the ipecacs are *Ouragoga Ipecacuanha* (Brotero) Farwell and *Ouragoga Acuminata* Karsten Farwell. -Drug. Circ. 1917, v. 61, p. 175.

Alsberg, C. L.: Examination of samples of importations of "ipecac" by the Bureau of Chemistry has shown that *Heteropteris pauciflora*, *Ipecacuanha fibrosa*, and *Ionidium* species have been substituted for *Cephaelis ipecacuanha*.—S. R. A. –Chem. 1917, No. 19, p. 52.

Karrer, P.: Researches on the constitution of the alkaloids of ipecac. The author finds that "dehydroemetine" is identical with the "rubremetine" of Carr and Pyman. The preparation and properties of an isomeride of emetine are also described. –Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 582-586, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 378 and 409.

Keller, Oskar: Researches dealing with the alkaloids of ipecac root. A commentary on the results of the author in comparison with those of Hesse, Carr and Pyman, Hermanns, Karrer, and Paul and Cownley.—Arch. Pharm. 1917, v. 255, p. 75–80, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 409.

Pyman, Frank L.: Two new alkaloids of emetine are described—namely, orthomethyl ether of psychotrine, which occurs in ipecac to the extent of 0.015 to 0.033 per cent, and emetamine, which is present in quantities amounting to about 0.002 to 0.006 per cent.—J. Chem. Soc. Lond. 1917, v. 111, p. 419–446.

Dohme, A. R. L.: Four samples of ipecac examined showed an emetine content of 1.54 to 1.66 per cent, and a cephaeline content of 0.42 to 1.09 per cent.—Proc. N. W. D. A. 1917, p. 510.

Table showing the number of samples of ipecac which were deficient in alkaloids.

Reporters.	Number of samples.		References.
	Examined.	Below standard.	
[illegible]	[illegible]	4	Proc. Pennsylvania Pharm. Assoc. 1917, p. [illegible]
[illegible]	[illegible]	17	Proc. N. W. D. A. 1917, p. [illegible]
[illegible]	[illegible]	4	J. Am. Pharm. Assoc. 1917, v. 6, p. [illegible]
[illegible]	[illegible]	1	J. Am. Pharm. Assoc. 1917, v. 6, p. [illegible]
[illegible]	[illegible]	1	Proc. Pennsylvania Pharm. Assoc. 1917, p. [illegible]
[illegible]	16	6	J. Am. Pharm. Assoc. 1917, v. 6, p. [illegible]

Brown, Howard S.: A discussion of experimental researches on the pharmacology of emetoidine (kryptonine), a constituent of ipecac.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1041–1045.

Walters, A. L. and Koch, E. W.: Pharmacological studies of the ipecac alkaloids and some synthetic derivatives of cephaeline.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 73–81, 185–197, and 341–364.

Crowell, E. C.: A discussion of the treatment of intestinal amebiasis with special reference to the use of ipecac and its derivatives.—J. Am. M. Assoc. 1917, v. 69, p. 6–10.

Ewe, G. E.: One lot of ipecac examined, apparently botanically authentic, contained no alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 86.

IRIS, N. F.

Parry, E. J.: Data showing the variations in some of the physical and chemical constants of concrete oil of orris obtained from different sources.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 275.

JALAPA.

Farwell, Oliver Atkins: The proper botanical designation for Jalap is *Exogonium Jalapa* (Nuttall and Coxe) Baillon.—Drug. Circ. 1917, v. 61, p. 232.

Rusby, H. H.: Since its recognition by the Ph. Brit. as a legitimate source of scammony resin, *Ipomoea orizabensis* has appeared on the market as powdered jalap or as a mixture of the same with powdered jalap.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

[illegible], Walter L.: The Brazilian jalap, the tuber of *Piptostegia pisonis*, contains twice to three times as much resin as the official jalap, and the resins are stated to be nearly identical chemically. The Pharmacopoeia should recognize the better of these two species, and therefore knowledge of the status of the Brazilian drug should be obtained before the next revision.—Am. Druggist. 1917, v. 65, No. 1, p. 26.

Anon: The total resin content of one sample of jalap assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L.: Four samples of jalap examined yielded 5.55 per cent, 5.8 per cent, 7.16 per cent, and 7.75 per cent resin, respectively.—Proc. N. W. D. A. 1917, p. 510.

Patch, E. L.: Seven samples of jalap examined yielded from 5.09 to 9.7 per cent of total resin and three of the samples yielded from 3.4 to 5.2 per cent of ash. Five of the samples were below the U. S. P. standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Scoville, W. L.: Of 10 samples of jalap examined during the latte part of 1915, five contained less than 6 per cent of resin, three between 6 and 7 per cent, one 7.29 per cent, and one 10.21 per cent. In 1916 the lowest resin content noted was 8.5 per cent, the highest 11.05 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

KAOLINUM, N. F.

Sproat, I. E.: An account of the refining and utilization of Georgia kaolins.—Bull. Bur. Mines, 1916, No. 128, p. 1–59.

Rohland, P.: Researches on the adsorption of dyes by kaolin and talc.—Chem. Abstr. 1917, v. 11, p. 1723.

Rapp: A study of the properties of bolus alba for the purpose of fixing standards of purity.—Pharm. Ztg. 1916, v. 61, p. 355–356 through Chem. Abstr. 1917, v. 11, p. 1720.

Herzog, J., and Leonhard, M.: Notes on chemical tests for the purity of bolus alba. –Apoth.-Ztg. 1916, p. 532 through Pharm. Weekblad, 1917, v. 54, p. 1258.

Richert, Theodore G.: A method for the evaluation of fullers' earth for the oil industry.—J. Ind. & Eng. Chem. 1917, v. 9, p. 599–600.

KAVA, N. F.

Farwell, Oliver Atkins: The species of kava kava of the N. F., IV, is *Piper esculentum* (Raf.) Farwell.—Drug. Circ. 1917, v. 61, p. 230.

KOLA, N. F.

Farwell, Oliver Atkins: *Cola* is not tenable for this genus, there being several older names, the oldest being *Bichea Stokes*. The most important species yielding kola is *Bichea acuminata* (Beauv.) Farwell.—Drug. Circ. 1917, v. 61, p. 231.

Anon.: The alkaloidal content of 11 samples of kola assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L.: One out of four lots of kola nut examined was of inferior quality.—Proc. N. W. D. A. 1917, p. 508.

Engelhardt, H.: Of eight samples of kola examined, three assayed below 1.5 per cent of caffeine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Roberts, J. G.: All lots of kola nut examined were of U. S. P. quality and contained 1.44 to 2.04 per cent of caffeine.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

Scoville, W. L. Two samples of kola examined assayed 1.70 and 1.94 per cent of caffeine, respectively.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

KRAMERIA, N. F.

Farwell, Oliver Atkins. *Krameria Ixina* Linné should be *Krameria Ixine* Linné. "Ixina" has been in general use, but the older spelling should be restored.—Drug. Circ. 1917, v. 61, p. 230.

LAC FERMENTATUM, N. F.

Sanna, A. A description of fermented milk products—"Laben Raib" of Egypt and "Mezzoradu" of Sardinia. An abstract.—Staz. sper. agric. ital. 1916, v. 49, p. 71–78 through Analyst, 1917, v. 42, p. 15.

LAC VACCINUM, N. F.

Arup, Paul S., et al. Analytical data showing the composition of morning and evening milk.—Analyst, 1917, v. 42, p. 118–124.

Bosworth, A. W., and Bowditch, H. I. Analytical data showing the character and quantity of mineral constituents in milk.—Boston M. & S. J. 1917, v. 177, p. 248–251.

Bosworth, A. W., and Bowditch, H. I. Experimental data showing the chemical changes produced by the addition of limewater to milk.—J. Biol. Chem. 1917, v. 28, p. 431–435.

Crowther, Charles, and Hynd, Alexander. Analytical data showing the distribution of the fatty acids in the milk fat of the cow and sheep.—Biochem. J. 1917, v. 11, p. 139–163.

Eckles, C. H., and Palmer, L. S. An experimental study of the influence of the age of the cow on the composition and properties of milk and milk fat.—J. Agric. Res. 1917, v. 11, p. 645–658.

Quagliariello, G. Observations on the effect of low temperatures on some physical and chemical properties of milk.—Physiol. Abstr. 1917, v. 2, p. 49.

Lee, Richard E., and McKee, Melvin G. A study of certain enzymes (reductases) with a view to developing a method for the differentiation of pasteurized milk from raw milk.—J. Ind. & Eng. Chem. 1917, v. 9, p. 360–366.

Brew, J. D., and Dotterrer. From experiments it is concluded that the results obtained by the microscopic method of counting bacteria in milk show that the plate counts are not counts of individual bacteria, but of groups of bacteria.—Bull. New York Agric. Exper. Sta. 1917, No. 439, p. 473–522.

McInerney, T. J. A study of the effect of clarification on the bacterial count of milk.—Bull. Cornell Univ. Agric. Exper. Sta. 1917, No. 389, p. 467–491.

Hunziker, O. F. Report of the chairman of the Official Dairy Instructors' Association Committee on Official Methods of Testing

Milk and Cream for Butter Fat.—J. Dairy Sci. 1917, v. 1, p. 38–44, through Chem. Abstr. 1917, v. 11, p. 2511.

Roy, A.: Fat determinations are not sufficient for establishing normal milk. The specific gravity of the milk serum should also be determined.—Svensk. farm. Tidskr. 1917, v. 21, p. 337–341.

Barthel, Chr.: From experiments it is concluded that the reductase test combined with the fermentation test is the best practical test for milk.—Ztschr. Unters. Nahr. u. Genussm. 1917, v. 34, p. 137.

Stutterheim, G. A.: Methyl red is recommended as an indicator in the determination of the acidity of milk.—Pharm. Weekblad, 1917, v. 54, p. 1120–1121.

Wilhelm, G.: Some notes on the examination of milk. Special note is made of the refractometer value of the serum of cow's milk, the density, the whey content, and the acidity. -Ztschr. Unters. Nahr. u. Genussm. 1916, v. 32, p. 573–576, through Analyst, 1917, v. 42, p. 328.

Pritzker, J.: An enumeration of conditions which caused a variation in the freezing point in milk. The freezing point of milk varies correspondingly with the refractometer number. -Ztschr. Unters. Nahr. u. Genussm. 1917, v. 34, p. 69–112, through Physiol. Abstr. 1917, v. 2, p. 619.

Polak, J. J.: From experiments it is concluded that the freezing point method affords the most trustworthy test for the presence of water in milk.—Chem. Weekblad, 1917, v. 14, p. 323–324.

Stutterheim, G. A.: Data on the freezing point of cow's milk are presented.—Pharm. Weekblad, 1917, v. 54, p. 458–459.

Müller-Hössly, E.: A discussion of a formula for the calculation of added water in adulterated milk and of the relations between the specific gravity and refractive index of the calcium chloride serum. – Mitt. Lebensm. Hyg. 1917, v. 9, p. 47–54, through Chem. Abstr. 1918, v. 12, p. 1568.

Ferris, L. W.: A note on the detection of added water in milk by means of a simplified molecular concentration constant.—J. Ind. & Eng. Chem. 1917, v. 9, p. 957–959.

Durand, Halsey: Notes on the detection of added water in milk.—J. Ind. & Eng. Chem. 1917, v. 9, p. 44–45.

Keister, J. T.: A report on the application of the cryoscopic method for the determination of added water in milk. –J. Ind. & Eng. Chem. 1917, v. 9, p. 862–865.

Anon.: A test for the detection of sucrose in milk makes use of the following reagent: Ammonium molybdate, 20 grams; hydrochloric acid, 100 grams; and water to make 1,000 cubic centimeters. The presence of sucrose is indicated by the development of an intensely blue color.—Pharm. Weekblad, 1917, v. 45, p. 1360; see also Répert. pharm. 1917, v. 28, p. 2, 82.

Hammer, B. W., and Bailey, D. E. A rapid volumetric method for the approximate estimation of chlorine in milk is described.—Bull. Iowa Agric. Exper. Sta. 1917, No. 41, p. 337–348.

[illegible], Y. From experiments it is concluded that Siegfried's nucleone is not a definite chemical compound, as its nitrogen and phosphorus content are not constant but vary.—Chem. Abstr. 1917, v. 11, p. 2350.

Anon. An editorial discusses the antineuritic properties of milk.—J. Am. M. Assoc. 1917, v. 69, p. 40–41.

LAPPA, N. F.

Dohme, A. R. L. A number of shipments of burdock root examined were heavily adulterated with two year old roots.—Proc. N. W. D. A. 1917, p. 519.

LEPTANDRA, N. F.

Farwell, Oliver Atkins. The proper nomenclature according to rules of priority for the plants producing this drug is *Veronicastrum Virginicum* (Linné) Farwell and *Veronicastrum Virginicum* (Lin.) Farwell var. *Leucanthum* Farwell.—Drug. Circ. 1917, v. 61, p. 231.

LIMONIS CORTEX.

Farwell, Oliver Atkins. The botanical source of the lemon is *Citrus Medica* Lin. var. *Limon* Lin. This is the oldest name and should be adopted in preference to the later one of Hooker filius, and *Citrus Limonum* Osbeck, if as a distinct species.—Drug. Circ. 1917, v. 61, p. 175.

LINIMENTUM AMMONIÆ.

Beringer, George M. In the U. S. P. VIII, formula for the preparation of ammonia liniment it was necessary to use oleic acid in order to saponify the cottonseed oil. In the new formula a perfect preparation is obtained by agitating one volume of ammonia water with three volumes of sesame oil.—Am. J. Pharm. 1917, v. 89, p. 352.

Lascoff, J. Leon. The U. S. P. IX formula for the preparation of ammonia liniment is far superior to that of the U. S. P., VIII. The preparation does not separate and it keeps better.—Am. Druggist. 1917, v. 65, No. 5, p. 25.

Hammell, P. E. Lard oil should be used in the preparation of ammonia liniment instead of sesame oil, as a better saponification would result.—Proc. New Jersey Pharm. Assoc. 1917, p. 86.

Fox, William G. Of 11 samples of ammonia liniment examined 10 were below standard.—Rep. New Jersey Dept. Health 1917, p. 62.

LINIMENTUM BELLADONNÆ.

Asher, Philip. A process for the assay of belladonna liniment should be introduced into the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

LINIMENTUM CAMPHORÆ.

Hommell, P. E.: Oil of sesame should replace the cottonseed oil in camphor liniment, as it is more emollient and more demulcent and better absorbed by the dermal surface. Cottonseed oil is sometimes deficient in these properties, especially the impure kind, which is resinous and drying.—Proc. New Jersey Pharm. Assoc. 1917, p. 83.

Diekman, George C.: Experienced laboratory men are by no means agreed that the degree of accuracy in the results obtained by the U. S. P. method for the assay of camphorated oil is such as to have justified the introduction of this method to the exclusion of all other methods, some of them much simpler of execution and yielding results sufficiently accurate for all practical purposes.—Proc. New York Pharm. Assoc. 1917, p. 97.

Bordier, H., and Roy, G.: From experiments it is concluded that when camphorated oil is agitated with water, a colloidal solution is formed. The biological and therapeutic significance of this property is discussed.—Compt. rend. acad. sc. 1917, v. 164, p. 648–650.

Kebler, L. F., and others: Of 42 samples of camphor liniment examined, 17, or 40 per cent, came within a 10 per cent limit; 24, or 57 per cent, came within a 15 per cent limit; 28, or 67 per cent, came within a 20 per cent variation from the U. S. P. standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 617–618.

Table showing some of the analytical results reported for camphor liniment.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Anon.	11	3	Bull. Vermont Bd. Health, 1917, v. 17, Nos. 3 and 4.
Casey, F. W.	13	7	Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16.
Frary, Guy G.	6	1	Rep. South Dakota F. & D. Com. 1917, p. 97.
Lea, E. J.	36	18	Rep. California Bd. Health, 1917, p. 162.
Todd, A. R.	13	4	Bull. Michigan D. & F. Dept. 1917, No. 264–267, p. 24.

LINIMENTUM CHLOROFORMI.

Asher, Philip: A process for the assay of chloroform liniment should be included in the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

Pozen, M. A.: Of 42 samples of chloroform liniment examined, 29 were rejected for being below standard.—Rep. District of Columbia Health Off. 1917, p. 50.

LINIMENTUM SAPONATO-CAMPHORATUM, N. F.

Lybing: An investigation of the color changes in opodeldoc. The greenish color change observed is not due to traces of copper, but to thymol. If thymol is replaced by oil of thmye, no color change will be observed after several months.—Svensk farm. Tidskr. 1917, v. 21, p. 135.

Fassati, C.: A war formula for the preparation of opodeldoc is presented.—Pharm. Post, 1917, v. 50, p. 197.

LINIMENTUM SAPONIS.

Hommell, P. E.: Soap liniment is no doubt an ideal vehicle for ammonia, turpentine, capsicum, etc., but not for the successful employment of chloroform, ether, oil of wintergreen, or menthol. Good olive oil is the best vehicle for these substances.—Proc. New Jersey Pharm. Assoc. 1917, p. 84.

Kebler, L. F., and others: Of 77 samples of soap liniment examined, 56, or 73 per cent, came within a 20 per cent variation from the official standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 684.

LINIMENTUM TEREBINTHINAE.

Hommell, P. E.: Turpentine liniment should be in the N. F. or deleted entirely, as it is seldom prescribed. Decades ago it was occasionally exhibited for scalds, frostbites, and other skin lesions, but to-day it is a dead one with the modern therapeutics.—Proc. New Jersey Pharm. Assoc. 1917, p. 83.

LINIMENTUM TEREBINTHINAE ACETICUM, N. F.

Hommell, P. E.: Stokes's liniment was originated for the purpose of obtaining the irritant and counterirritant action of turpentine. A combination of turpentine with camphorated oil answers the same purpose. The oil of lemon and rose water in it does not successfully conceal the strong odor of turpentine, as all dispensers know. The N. F. would be better off without this preparation, as it is but rarely prescribed.—Proc. New Jersey Pharm. Assoc. 1917, p. 83.

LINUM.

Kunz-Krause, H., and Brandes, C.: The description of flaxseed in the fifth edition of the Ph. Germ. excludes the admixture of the yellow seed, as distinguished from the third and fourth editions. The authors find on investigation that such exclusion is unwarranted, not only with respect to size, weight, and oil content of the grain, but also as regards the power of germination.—Arch. Pharm. 1916, 254, p. 33-44 through Chem. Abstr. 1917, v. 11, p. 2388.

LIQUORES.

Anon.: General formulas for the preparation of isotonic solutions are presented and discussed. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 129-132.

Bradley, Theodore J.: A discussion of the preparation of percentage solutions of chloral hydrate and silver nitrate.—J. Am. Pharm. Assoc. 1917, v. 6, p. 955-956.

Broeksmit, T. C. N.: A method for preparing Liquor Ferri mitior et Calcis is described.—Pharm. Weekbl. 1917, v. 54, p. 1399.

Palme, Herman: A detailed study of the products formed in the preparation of Liquor Ferri Caseinati: "The chief components are colloidal $Fe(OH)_3$ and split products of casein, together with some sugar, glycerol, and alcohol."—Arch. Pharm. Chem. Copenhagen, 1917, v. 24, p. 137–141, 155–160, 166–168.

Stewart, Douglas H.: Notes on the preparation and use of the solution of magnesium hypochlorite.—New York M. J. 1917, v. 105, p. 648–649.

Duret, F.: A method for the preparation of magnesium hypochlorite solution. This solution is stated to be much more stable than Labarraque's or Dakin's solution. An abstract.—J. pharm. et chim. 1917, v. 15, p. 287.

Jacquot: A description of methods for the preparation of aqueous solutions of benzoate of mercury and of oleaginous solutions of calomel.—Farm. Españ. 1917, v. 49, p. 599–600.

Romanelli, Romolo: A note on the use of camphor for the preservation of solutions which are prone to be attacked by microorganisms.—Giorn. farm. chim. 1917, v. 66, p. 126–128.

LIQUOR ALUMINI ACETATIS, N. F.

Schoorl, N.: Investigation showed that the Liquor Alumini Acetatis of the Ph. Nedl. is a saturated solution of lead sulphate in basic aluminum acetate. It is therefore not permissible to dispense a dilute solution of basic aluminum acetate for this preparation, as has become the practice in Holland.—Pharm. Weekblad, 1917, v. 54, p. 892–898.

LIQUOR ALUMINI SUBACETATIS, N. F.

Mayer, Joseph L.: In commenting on a standard for the solution of aluminum subacetate it is stated that the N. F., IV, standard, if based upon the method of assay weighing as Al_2O_3, is too low. In place of "each gram of solution of aluminum subacetate corresponding to not less than 0.02363 gm. nor more than 0.02521 gm. of aluminum oxide (Al_2O_3)," the solution yields practically 0.0300 gm., or 2.882 per cent.—Pharm. Era, 1917, v. 50, p. 212.

LIQUOR ARSENI ET HYDRARGYRI IODIDI.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of Donovan's solution.—Am. J. Pharm. 1917, v. 89, p. 171.

Rosen, Joseph: The results obtained when assaying Donovan's solution for arsenious iodide are usually low, owing to the oxidation of the arsenious iodide. Tests carried out with the Gooch-Browning method showed the proper content of total arsenic.—J. Am. Pharm. Assoc. 1917, v. 6, p. 951.

LIQUOR CALCIS.

Anon.: A sample of limewater examined in England was found to be deficient in lime to the extent of 20.9 per cent.—Brit. Food J. 1917, v. 19, p. 180.

Congdon, Leon A.: Of 30 samples of limewater examined between 1905 and 1917, 19 were passed and 11 were illegal or below the standard, making a percentage of 63.33 per cent legal and 36.67 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Guthrie, C. P.: One of five samples of limewater assayed contained less $Ca(OH)_2$ than required by the U. S. P.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 352.

Kebler, L. F., and others: Of 62 samples of limewater examined, 47, or 76 per cent, came within 20 per cent of the U. S. P. standard, and 49, or 79 per cent, came within 25 per cent of the standard.—J. Am. Pharm. Assoc. 1917, v. 6, p. 618.

Sayre, L. E., et al.: All of five samples of limewater assayed were up to standard.—Rep. Kansas Bd. Health, 1916, v. 12, p. 427-428.

LIQUOR COCCI, N. F.

Muttelet, C. F.: Some analytical characteristics of the ammoniacal extract of cochineal are presented and discussed.—Ann. Falsif. 1917, v. 10, p. 228-229.

LIQUOR CRESOLIS COMPOSITUS.

Lascoff, J. Leon: The compound solution of cresol has been improved by the addition of alcohol, as directed in the U. S. P. IX. It has been further improved by the use of sodium hydroxide in place of potassium hydroxide, and the cost of the preparation has thereby been reduced.—Am. Druggist, 1917, v. 65, No. 5, p. 23.

Anon.: Notes on the preparation of the compound solution of cresol.—N. A. R. D. J. 1917, v. 25, p. 15-16.

Asher, Philip: The Pharmacopoeia should prescribe a method of assay for solution of cresol compound.—Am. J. Pharm. 1917, v. 89, p. 175.

Dohme, A. R. L.: As the Bureau of Chemistry is insisting upon close agreement both in cresol and water content, an assay process for this preparation should be given in the U. S. P.—Proc. N. W. D. A. 1917, p. 503.

Davies, W. W.: In order to comply with the labeling requirements of the insecticide act of 1910, it is necessary to determine the amount of inert matter (water) contained in the solution. It is thought that the U. S. P. should, therefore, prescribe a test for this purpose.—Pract. Drug. 1917, v. 35, No. 12, p. 28.

Engelhardt, H.: A sample of solution of cresol compound was rejected because it contained 20 per cent of water. It had probably been manufactured with soft soap.—J. Am. Pharm. Assoc. 1917, p. 414.

LIQUOR FERRI ALBUMINATI, N. F.

Anon.: In commenting on the N. F. method of preparing solution of albuminate of iron, it is stated that the same is a delicate product and should be properly preserved. It should be stored in cork-stoppered, amber-colored bottles, containing not over 8 ounces, securely corked, in an even, cool temperature, and protected from acid fumes.—N. A. R. D. J. 1917, v. 24, p. 8.

LIQUOR FERRI CITRATIS, N. F.

Engelhardt, H.: Some of the samples of the solution of ferric citrate examined were in a gelatinous condition, while others did not form clear solutions.—J. Am. Pharm. Assoc. 1917, v. 6, p. 414.

LIQUOR FORMALDEHYDI.

Stutterheim, G. A.: Formaldehyde in aqueous solution can be estimated by determining the refractive index of the solution. The values of this constant for percentages from 1 to 45 at 17 to 18° C. are given. The mean increase for each per cent is 0.00111.—Pharm. Weekblad, 1917, v. 54, p. 716–717.

Woker, Gertrud: An explanation of results presented in a former paper dealing with the reaction between starch and formaldehyde and the supposed diastatic properties of formaldehyde.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 447–448.

von Kaufmann, Wilhelm: Observations on the reaction between formaldehyde and starch, and the supposed diastatic properties of formaldehyde.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 251.

LIQUOR HYDROGENII DIOXIDI.

Nussbaum: A description of an electrolytic method for the preparation of hydrogen dioxide.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 238–239.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the keeping qualities of hydrogen peroxide and whether or not a preservative is needed.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Congdon, Leon A.: The solution of hydrogen peroxide may be preserved indefinitely without loss of strength if kept in an amber-colored bottle in a cool place. The bottle should be stopped with cotton to filter out dust particles.—Proc. Kansas Pharm. Assoc. 1917, p. 90.

Liebknecht, O., and Schaidhauf, A.: U. S. patent No. 1,213,921. Hydrogen peroxide solutions are stabilized by the addition of 0.1 to 0.3 per cent of a tin compound such as $Sn(OH)_4$ or Na_2SnO_3.—Chem. Abstr. 1917, v. 11, p. 1027.

Akt. Astra Apotek. Kemiska Fabriken. Swedish patent No. 41,709 related to the addition of phenol ethers, such as guaiacol, cresol, or derivatives, to solution of hydrogen peroxide for the purpose of imparting stability.—Chem. Abstr. 1917, v. 11, p. 1273.

Anon.: Under laboratory notes of the H. K. Mulford Co. it is stated that the yellow color occasionally noted in solutions of hydrogen peroxide is due to the decomposition of acetanilid, which is used as a preservative agent.—Drug. Circ. 1917, v. 61, No. 1, p. 25.

Denigès, G.: A very sensitive test for hydrogen peroxide is based on the formation of dihydroxytartaric acid. Mix 2 cubic centimeters of 5 per cent tartaric acid solution with 2 drops of a 5 per cent ferrous ammonium sulphate solution; add 1 to 2 drops of the hydrogen peroxide solution, followed by 5 to 6 drops of sodium hydroxide solution. A violet color will develop in the presence of hydrogen peroxide.—Anal. Chim. analyt. 1917, v. 22, p. 193.

Macri, V.: Notes on some properties of hydrogen peroxide. The estimation of free acid in hydrogen dioxide solution may be effected by titration with permanganate, the end point being shown by the appearance of a brownish-yellow coloration.—Boll. chim.-farm. 1917, v. 56, p. 417–418.

Jamieson, George S.: A new method for the determination of hydrogen dioxide is described. The method is based on adding a measured volume of hydrogen dioxide solution to an alkaline solution containing an excess of standard sodium arsenite. After the reaction is completed concentrated hydrochloric acid is added, and the excess of arsenite is titrated with a standard solution of potassium iodate.—Am. J. Sci. 1917, v. 44, p. 150–152.

Frerichs, G.: Notes on the permanganate method of the Ph. Germ. for the quantitative estimation of hydrogen peroxide.—Apoth. Ztg. 1916, v. 31, p. 620–621, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 121.

Bury, A.: A rapid method for the assay of hydrogen peroxide solutions is based on the liberation of oxygen when a solution of NaOCl is added.—J. pharm. et chim. 1917, v. 15, p. 189–195.

Hardy, James: A report of an incompatibility in a prescription containing, among other ingredients, solution of hydrogen dioxide and glycerin. The hydrogen dioxide reacts with the glycerin forming oxalic acid.—Proc. Wisconsin Pharm. Assoc. 1917, p. 113.

Zotier, V.: A continuation of work previously reported dealing with the action of hydrogen peroxide on the neutral salts of lead. The reaction is violent with the acetate, formate, chromate, and sulphide.—Bull. Soc. chim. France, 1917, v. 21, p. 241–245.

Table showing some of the analytical results reported for the solution of hydrogen dioxide.

Reporters.	Number of samples		References.
	Examined.	Rejected.	
McGill, A.	37	1	Bull Lab. & Inl. Rev. Dept. Canada, 1916, No. 306, p. 4, 5, and 6
Patch, E. L.	1	1	J. Am. Pharm. Assoc. 1917, v. 6, p. 410.
Roberts, J. G.	1	1	Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.
Sayre et al.	6	4	Rep. Kansas Bd. Health, 1917, v. 13, p. 169.
Tice, William G.	1	1	Rep. New Jersey Dept. Health, 1917, p. 62.

LIQUOR HYPOPHYSIS.

Guggenheim, M.: A reply to Fühner's criticisms of the work on the active principle of the pituitary body.—Biochem. Ztschr. 1917, v. 81, p. 274–277, through Physiol. Abstr. 1917, v. 2, p. 517.

Adams, H. S.: A study of the thermal decomposition of the oxytocic principle of pituitary solutions. This constituent is rapidly destroyed at a temperature of 100° C., with a hydrogen-ion concentration of 10^{-5}.—J. Biol. Chem. 1917, v. 30, p. 235–242.

Abel, J. J., and Pincoffs, M. C.: A report of researches showing the presence of albumoses in extracts of the posterior lobe of the hypophysis cerebri. The albumoses present are stated to account fully for the chemical reactions which characterize the active principles of Fühner.—Proc. Nat. Acad. Sc. 1917, v. 3, p. 507–517.

Roth, G. B.: A report on investigations to determine the relative value of pituitary extracts made from various species of mammals. Data showing the variation in the activity of commercial preparations is also given. —Bull. Hyg. Lab. 1917, No. 109, p. 9.

Eckler, Charles R.: From the results obtained in the experimental standardization of pituitary extract the author concludes that the strength specified in the Pharmacopœia is about one-tenth that of the average commercial preparation.—Am. J. Pharm. 1917, v. 89, p. 195–202; Lilly Sci. Bull. 1917, No. 8, p. 277–284.

Hamilton, H. C., and Rowe, L. W.: A report of experimental work on the standardization of pituitary extract.—J. Lab. & Clin. Med. 1916–1917, v. 2, p. 120–129.

Houssay, B. A.: A résumé of our present knowledge concerning the active principles of pituitary extract. The blood pressure and uterus methods are recommended for the biological assay and the galactagogue action for the determination of the minimal dose.—Chem. Abstr. 1917, v. 11, p. 33–80.

Pittenger, Paul S., and Vanderkleed, C. E.: A preliminary note on the value of beta-iminazolylethylamine hydrochloride as a standard for testing pituitary extracts.—J. Am. Pharm. Assoc. 1917, v. 6, p. 131–133.

Pittenger, Paul S.: Comments on the U. S. P. method for the assay of solutions of the pituitary body with special reference to the standard adopted.—J. Am. Pharm. Assoc. 1917, v. 6, p. 871–872.

Squire, J. P.: Histamine is evidently not as satisfactory a standard for pituitary extract as a solution made from the dried defatted gland, since histamine does not possess the well-known physiological property of raising the blood pressure.—J. Am. Pharm. Assoc. 1917, v. 6, p. 714.

Houssay, B. A.: A report of researches to determine the action of the pituitary extracts and their active principles on respiration.—J. physiol. et path. gén. 1917, v. 17, p. 436–443.

Schmidt, Harry B.: The effect of pituitary injections on the blood pressure of febrile patients.—Arch. Int. Med. 1917, v. 19, p. 1059–1061.

Mundell, Joseph J.: The present status of pituitary extract in labor. A general review.—J. Am. M. Assoc. 1917, v. 68, p. 1691–1693.

Rosenfeld, G.: Notes on the treatment of diabetes insipidus with pituitary extract.—Chem. Abstr. 1917, v. 11, p. 484.

Wertenbaker, William: A report of a case of spontaneous rupture of the uterus following the administration of pituitary solutions.—J. Am. M. Assoc. 1917, v. 68, p. 1612–1613.

LIQUOR MAGNESII CITRATIS.

Scoville, W. L.: The use of magma of magnesia and a 50 per cent solution of citric acid is recommended for the extemporaneous preparation of solution of magnesium citrate.—Bull. Pharm. 1917, v. 31, p. 152.

Lascoff, J. Leon: Changes made in the formula for the preparation of the solution of magnesium citrate, although good, may lead the pharmacists to purchase the preparation from manufacturers instead of preparing it themselves.—Am. Druggist, 1917, v. 65, No. 5, p. 25.

Anon.: If sodium bicarbonate is used in place of potassium bicarbonate for "charging" the solution of magnesium citrate, it should only be used in tablet form, as the liberation of the gas is so rapid when the powder is used that an explosion might result.—Drug. Circ. 1917, v. 61, p. 60.

Long, E. J.: Of four samples of citrate of magnesia examined, two were rejected.—Rep. California Bd. Health, 1917, p. 162.

Pease, M. A.: Of 45 samples of solution of magnesium citrate examined, 23 were rejected.—Rep. District of Columbia Health Off. 1917, p. 54.

Tice, Willard G.: Of 93 samples of solution of magnesium citrate examined, 11 were below standard.—Rep. New Jersey Dept. Health, 1917, p. 16.

LIQUOR PEPSINI AROMATICUS, N. F.

Hommell, P. E.: There can be no advantage of associating carminatives with pepsin to the extent that we find in this solution, as carminatives contain besides volatile oils, tannic acid, which is incompatible. What pepsin requires in solution or in powdered form is a certain percentage of hydrochloric acid.—Proc. New Jersey Pharm. Assoc. 1917, p. 83.

LIQUOR PHOSPHATUM COMPOSITUS, N. F.

Anon.: The N. F. formula for compound solution of phosphates is incorrect in that an excessive amount of water is directed to be used. The amount of water in the formula should be changed from 300 milliliters to 100 milliliters.—Drug. Circ. 1917, v. 61, p. 247.

LIQUOR POTASSÆ CHLORINATÆ, N. F.

Bury, A.: A description of a rapid volumetric method for the evaluation of Javelle water. The method consists in measuring the oxygen liberated when the solution of chlorinated potassa is allowed to act upon hydrogen peroxide in an alkaline medium. -J. pharm. et chim. 1917, v. 15, p. 189–193.

Cazin and Krongold, S.: Notes on the value of Javelle water in the treatment of infected wounds. Javelle water is stated to be superior to Dakin's solution because of its superior bactericidal properties and because it is less irritating.—Compt. rend. acad. sc. 1917, v. 165, p. 569–572.

LIQUOR POTASSII ARSENITIS.

Sjöström, F. W.: An investigation of the methods of various pharmacopœias for the evaluation of Fowler's solution and of its keeping qualities. Light was found to have but little influence on the oxidation of the solution, whereas the presence of certain organic compounds were found to aid oxidation.—Pharm. Ztg. 1917, v. 62, p. 120–122, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 171.

Engelhardt, H., and Winters, O. E.: Experimental data showing the rate of oxidation of arsenous acid to arsenic acid in Fowler's solution.—J. Am. Pharm. Assoc. 1917, v. 6, p. 134–136.

Schreinemakers, F. A. H., and DeBaat, Mej. W. C.: On the composition and properties of the arsenites of sodium.—Chem. Weekblad, 1917, v. 14, p. 262–267, 288–290.

Eskew, Harry L.: Of 48 samples of Fowler's solution examined, 11 were rejected for being below standard.—Rep. Tennessee F. & D. Dept. 1917, p. 15.

Hulbert, Roberts: One of three samples of Fowler's solution examined contained only 82 per cent of the required amount of As_2O_3.—Bull. North Dakota Exper. Sta. F. Dept. 1917. v. 4, p. 345.

LIQUOR SODÆ CHLORINATÆ.

Dakin and [illegible]: Experiments showing how the Hermite process for electrolysis of sea water may be applied to the preparation of solution of sodium hypochlorite. Year-Book of Pharmacy, 1917, p. 184.

Cullen, G. E., and Austin, J. H.: Notes on the preparation of Dakin's hypochlorite solution.—Proc. Soc. Exper. Biol. Med. 1917, v. 15, p. 41-42.

Anon.: A discussion of the Carrel-Dakin solution with directions for preparation and testing.—Midl. Drug. 1917, v. 51, p. 200-201.

[illegible], Frederick: A description of a simplified method for the preparation of Carrel-Dakin solution.—J. Am. M. Assoc. 1917, v. 69, p. 175.

Thum, John K.: A general discussion of the origin and methods of preparation of the Carrel-Dakin solution.—J. Am. Pharm. Assoc. 1917, v. 6, p. 458-461.

Griffith, Ivor: The author gives the results of his experience in preparing Carrel-Dakin solution, and emphasizes the necessity of assaying the chlorinated lime used.—Proc. Pennsylvania Pharm. Assoc. 1917, v. 40, p. 237; see also Am. J. Pharm. 1917, v. 89, p. 497.

Anon.: A volume by Carrel and Dehelly, entitled "Traitement des Plaies Infectées" treats of the methods of preparing Carrel-Dakin solution and of its properties and uses.—Am. Drug. 1917, v. 65, p. 97.

Anon.: "Hyclorite" is the name used in New and Nonofficial Remedies to designate a commercial form of hypochlorite solution.—J. Am. M. Assoc. 1917, v. 69, p. 1081.

[illegible], H. I.: The pink color sometimes noticed in hypochlorite solution is due to the formation of permanganic acid as a result of the presence of manganese as an impurity in the chlorinated lime.—Pharm. J. 1917, v. 98, p. 515.

Vanderkleed, Charles E., and Ewe, George E.: Data showing the effects of manganese salts on the keeping qualities of sodium hypochlorite. The experiments indicate that only calcium hypochlorite, which yields a colorless and not a pink solution, is suitable for the manufacture of the solution of sodium hypochlorite.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 234.

[illegible], M.: Data relative to the stability of concentrated solutions of sodium hypochlorite are presented. A solution containing 35.70 grams of active chlorine per liter showed practically no deterioration in 30 days when kept in the dark, but a very marked deterioration was noted in the same solution when exposed to sunlight.—Bull. sc. pharmacol. 1917, v. 24, p. 347-349.

[illegible], Fritz, and [illegible], Franz: Data relative to the stability of Dakin's sodium hypochlorite solution are presented. Dilute solutions were found to have lost 10 per cent in strength in two months whereas concentrated solutions lost 40 per cent in one month.—Münch. med. Wchnschr. 1917, v. 64, p. 1528-1529.

Wischo, Fritz: A note on the use of brucine-hydrochloric acid or brucine-sulphuric acid for the identification of chlorates in the presence of hypochlorites.—Pharm. Post, 1917, v. 50, p. 381, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 539–540.

Dienert, F., and Wandenbulke, F.: A method for the estimation of free chlorine in hypochlorite solutions is described. Ammonium sulphate to the extent of 150 parts for every part of chlorine is added to the solution to be examined, after which potassium iodide is added, and the liberated iodine titrated with standard arsenious acid solution.—Compt. rend. acad. sc. 1917, v. 165, p. 28–29.

Bury, A.: A method for the volumetric analysis of hypochlorite solutions used for sterilizing water depends on the reaction which takes place between a hypochlorite and hydrogen dioxide.—J. pharm. et chim. 1917, v. 15, p. 189–195.

Anon.: A description of an iodometric method for the determination of free chlorine in solutions of sodium hypochlorite.—Compt. rend. acad. sc. 1917, v. 165, p. 28.

Fraser, John, and Bates, H. J.: A general article dealing with the antiseptic values of hypochlorous acid (eusol).—J. Roy. Army Med. Corps, 1916, v. 27, p. 79–84, through Chem. Abstr. 1917, v. 11, p. 171.

Fiessinger, Noël, and Clagne, René: A study of the antiseptic action of alkaline hypochlorites, with special reference to the solution of Dakin–Daufresne. An abstract.—Presse Med. 1917, v. 25, p. 407.

Barrett, M. T.: A note on the use of the Carrel-Dakin solution in the cleaning out of pyorrhea pockets.—Dental Cosmos, 1917, v. 59, p. 446–448.

A number of investigators: Notes on the use of the Carrel-Dakin solution in the treatment of wounds and infected areas.—J. Am. M. Assoc. 1917, v. 68, p. 110 and v. 69, p. 651, 1727 and 1994.

LIQUOR SODII CHLORIDI PHYSIOLOGICUS.

Chiaria, P.: Notes on the preparation of physiological salt solution.—Giorn. farm. chim. 1917, v. 66, p. 221–224.

LIQUOR ZINCI CHLORIDI.

Sjöström: A description of a titration method for the estimation of zinc in solutions of zinc chloride.—Farmacevtisk Revy, 1916, No. 35, p. 489, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 142–143.

LITHII CARBONAS.

Frerichs, G.: A description of a method for detecting the presence of magnesium carbonate in lithium carbonate.—Apoth.-Ztg. 1916, p. 453, through Pharm. Weekblad, 1917, v. 54, p. 766.

LOBELIA.

Penick, S. B.: Lobelia is described in the U. S. P. as "the dried leaves and flowering tops of *Lobelia inflata* Linné, without the presence or admixture of more than 10 per cent of stems or other foreign matter." In the flowering tops there must be some stem, which would possibly be 10 per cent of the total, so that no more stem can be present if the drug strictly conforms to requirements. None of this drug will, therefore, be found on the market within 50 per cent of the U. S. P. requirements.—J. Am. Pharm. Assoc. 1917, v. 6, p. 696.

Snyder, J. P.: At present lobelia which meets the U. S. P. requirement is unobtainable. This is due to the fact that drug collectors are prone to gather the entire herb when only the leaves and flowering tops are specified.—J. Am. Pharm. Assoc., 1917, v. 6, p. 713.

Scoville, Wilbur L.: An assay for lobelia should be introduced into the next pharmacopoeia. If not, good reasons based upon investigation should be given for not doing so.—Am. Druggist, 1917, v. 65, No. 1, p. 26.

van Leeuwen, W. Storm: A note on the physiological standardization of lobelia preparations.—Pharm. Weekblad, 1917, v. 54, p. 1539–1544.

Dohme, A. R. L.: One lot of lobelia examined failed to comply with the U. S. P. requirements, as it did not have the flowering tops and contained 60 per cent of the stem portion.—Proc. N. W. D. A. 1917, p. 515.

Anon.: The alkaloidal content of two samples of lobelia assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

LUPULINUM. N. F.

Dohme, A. R. L.: A variation of from 12.6 to 33.2 per cent of ash content showed 7 of 11 samples of lupulinum to be nonstandard drugs, the N. F. limit of ash being 16 per cent.—Proc. N. W. D. A. 1917, p. 510.

Engelhardt, H.: Five of the 12 samples of lupulin examined were deficient in ether-soluble constituents.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Roberts, J. G.: One sample of lupulin was rejected because it contained only 41.7 per cent of ether-soluble matter and yielded 44.56 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

Scoville, W. L.: The ash content of 14 samples of lupulin ranged between 8 and 41.8 per cent. Three of the samples yielded less than 10 per cent and three between 10 and 15 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

MAGMA FERRI HYDROXIDI, N. F.

Neidle, M., and Barab, J.: A rapid method for the preparation of the colloidal hydrous oxides of iron, chromium, and aluminum is described.—J. Am. Chem. Soc. 1917, v. 39, p. 71–81.

Pauli, W., and Matula, J.: A physico-chemical analysis of colloidal ferric hydroxide. Kolloid-Ztschr. 1917, v. 21, p. 49 63, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. .563–564.

MAGMA MAGNESIÆ.

Mueller, Bertha: A more satisfactory magnesia magma is obtained if dry magnesium sulphate is substituted for the ordinary sulphate and the amount of water reduced. Am. J. Pharm. 1917, v. 89, p 306–309.

Sayre et al.: Four of 13 samples of milk of magnesia examined were either high or low in $Mg(OH)_2$ content.—Rep. Kansas Bd. Health, 1917, v. 13, p. 170.

MAGNESII CARBONAS.

Utech, P. Henry: Magnesium carbonate has the power of absorbing many odors, its behavior in this respect being similar to that of willow charcoal. If allowed to remain in close contact with such aromatic substances as camphor, asafetida, naphthalene, etc., it is rendered practically unfit for pharmaceutic uses.—Drug. Circ. 1917, v. 61, p. 398.

Dohme, A. R. L.: One sample of magnesium carbonate examined was found to contain an excess of calcium and iron.—Proc. N. W. D. A. 1917, p. 515.

Gloor, F.: In some lots of magnesium carbonate examined as high as 9.97 per cent of calcium, calculated as calcium oxide, was found.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

Roberts, J. G.: Magnesium carbonate (technical) is usually of U. S. P. quality, except that it contains an excess of calcium.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

MAGNESII OXIDUM.

Snyder, J. P.: There appears to be very little calcined magnesia upon the market that will fulfill the U. S. P. requirements, as most of it contains an excess of moisture, assays low, and yields more calcium than is permitted in the official salt. –J. Am. Pharm. Assoc. 1917, v. 6, p. 714.

Astruc, A.: A discussion of the methods of examination and conditions as to purity given in the French Codex for calcined magnesia. Data obtained in the analysis of 26 commercial samples of the substance are presented.—J. pharm. et chim. 1917, v. 16, p. 65–77, 110–115.

van der Haar, A. W.: In a report on the analyses of chemicals in Holland during the past few years it is stated that most of the samples of magnesium oxide tested contained at least 50 per cent of carbonate.—Pharm. Weekblad, 1917, v. 54, p. 256.

Roberts, J. G.: Two "broken" samples of magnesium oxide (light) were of undesirable quality. One lost 23.57 per cent of its weight upon ignition and contained 2.56 per cent of calcium. The other lot lost 18.03 per cent of its weight upon ignition and contained carbonates and an excess of calcium.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

Dover, Mary V., and Marden, J. W.: A comparison of the efficiency of some common desiccants, including calcined magnesia.—J. Am. Chem. Soc. 1917, v. 39, p. 1609–1614.

MAGNESII SULPHAS.

[illegible], S.: U. S. patent No. [illegible] describes the manufacture of magnesium sulphate from serpentine, steatite, peridotite, and other minerals. Chem. Abstr. 1917, v. 11, p. 192.

[illegible], A. L.: Magnesium sulphate, its history, properties, and uses.—Am. J. Clin. Med. 1917, v. 24, p. 501–504.

[illegible] and Moore: The authors find that intraspinal injections of magnesium sulphate are of use in controlling the convulsions caused by strychnine poisoning.—J. Exper. M. 1917, v. 25, p. 83.

Morison and Tulloch: Observations on the use of a saturated solution of magnesium sulphate in the treatment of wounds.—Year-Book of Pharmacy 1917, p. [illegible].

MALTUM.

Farwell, Oliver Atkins: The botanical source of malt is given as *Hordeum sativum* Jessen. This is but a synonym and should give way to the valid name, *Hordeum vulgare* Linn.—Drug. Circ. 1917, v. 61, p. 175.

Wood, E. S.: Directions are given for grading graphite, gunpowder, and malt.—Met. Chem. Eng. 1917, v. 16, p. 654–655, through Chem. Abstr. 1917, v. 11, p. 2264.

MANGANI DIOXIDUM PRAECIPITATUM.

Barnebey, O. L., and Hawes, W. C.: A report of experiments with the iodimetric method for the determination of the available oxygen in mineral and precipitated oxidized forms of manganese.—J. Am. Chem. Soc. 1917, v. 39, p. 607–610.

Rupp, E.: A method for the evaluation of pyrolusite consists in adding 1 grams of KI, 4 grams of Na_2HPO_4, 10 cubic centimeters H_2O, and 10 cubic centimeters of 25 per cent H_3PO_4 to 0.2 gram of the finely powdered sample, and titrating liberated iodine with

0.1 N $Na_2S_2O_3$, using starch as an indicator.—Arch. Pharm. 1916, v. 254, p. 135–137, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 390.

Barnabey, O. L.: A report of investigations relative to the determination of available oxygen in pyrolusite.—J. Ind. & Eng. Chem. 1917, v. 9, p. 961–967.

Witzemann, Edgar J.: Data showing the variations in the physical properties of precipitated and colloidal manganese dioxide from the point of view of physico-chemical equilibrium.—J. Am. Chem. Soc. 1917, v. 39, p. 25–33.

Engelhardt, H.: Several samples of black oxide of manganese were rejected for assaying below the U. S. P. requirements. They assayed from 60 to 61 per cent of MnO_2. J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

MANNA.

LaWall, Charles H., and Forman, Leroy: Experimental data are presented showing some of the physical and chemical properties of commercial samples of manna. The need for further work on the determination of the mannite content is emphasized.—J. Am. Pharm. Assoc. 1917, v. 6, p. 22–23.

Maske, Wm., jr.: Notes on the use of manna in the preparation of soft mass pills.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1058–1059.

MASSA HYDRARGYRI.

Asher, Philip: An explanation of the U. S. P., IX, method for the assay of mass of mercury.—Am. J. Pharm. 1917, v. 89, p. 171.

Partridge, W.: A discussion of methods for the detection of rose petals in blue pill. The author does not agree with the statement of Deehan and Maben that the absence of a red color when the mass is digested with warm acetic acid and filtered indicates a substitution of confection of hops for the official excipient, confection of rose.—Analyst, 1917, v. 42, p. 171.

MASTICHE, N. F.

Lloyd, John Uri: On the oriental uses of gum mastic, including formulas for a number of preparations into which it enters.—Am. J. Pharm. 1917, v. 89, p. 1–8.

MATICO, N. F.

Farwell, Oliver Atkins: Matico is derived from *Piper granulosum* Ruiz et Pavon, which is the valid name for the species.—Drug. Circ. 1917, v. 61, p. 231.

MEL.

Atkins, W. R. G.: A description of a method for the analysis of honey and other substances containing levulose. The method is based on the oxidation of the dextrose with bromine.—Analyst, 1917, v. 42, p. 12–13.

[illegible], J., and [illegible], K. From experiments it is concluded that the precipitin reaction of Kraus and others is a trustworthy biological test for the identification of honey, since the honey albumen is independent of the plants visited and originates in the body of the bee.—Arch. Pharm. 1916, v. 254, p. 330-345, through Physiol. Abstr. 1917, v. 2, p. 461.

[illegible], F. L. Data obtained by the use of various methods for the detection of artificial invert sugar in honey are presented. Bryan's modification of Fiehe's test is recommended as being the most suitable.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 169-174.

Roberts, J. G. A sample of Florida honey examined contained added invert sugar according to the U. S. P. test. All other samples were of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 85.

[illegible], Theodor. Directions are given for the preparation of artificial honey by inversion of sugar with lemon juice and the subsequent addition of coloring and flavoring materials.—Südd. Apoth.-Ztg. 1916, v. 56, p. 272-273.

W. G. N. v. d. S. A book review of a volume by Fr. Berger on the history and medicinal applications of honey and wax.—Chem. Weekblad, 1917, v. 14, p. 793.

Hortvet, Julius. Of 18 samples of honey examined, three were reported because of poor quality.—Rep. Minnesota D. & F. Com. 1917, p. 25.

MELILOTUS, N. F.

Farwell, Oliver Atkins. The botanical name for this drug should read *Melilotus Melilotus officinalis* (Linné) Ascherson and Graebner.—Drug. Circ. 1917, v. 61, p. 231.

MENTHA VIRIDIS.

Farwell, Oliver Atkins. *Mentha spicata* Linn. is the older and valid name for the plant that has been more commonly known as *Mentha* [illegible], and the spearmint of cultivation and of pharmacy is *Mentha viridis*. *Mentha spicata* should, therefore, be dropped.—Drug. Circ. 1917, v. 61, p. 175.

Dohme, A. R. L. In two instances spearmint which was examined was stalky and practically devoid of leaves.—Proc. N. W. D. A., 1917, p. 521.

MENTHOL.

[illegible], Henry B. A brief note on the preparation of menthol in Japan, with statistics showing the amount produced and exported during the years 1912 to 1916, inclusive.—Com. Rep. 1917, No. 185, p. 191.

Wright, Fred E. Studies in the crystallization of menthol. Four different forms of crystals were obtained—i. e., α, β, γ, δ. Three of these apparently bear monotropic relations to the stable α form.—J. Am. Chem. Soc. 1917, v. 39, p. 1515–1524.

METHYLIS SALICYLAS.

Anon.: Owing to the scarcity of synthetic methyl salicylate, the birch-oil industry of Pennsylvania had been revived and distillation of the oil has been resumed with old-time vigor.—Am. Perf. 1917, v. 11, p. 323.

Anon.: In a test to differentiate between oil of wintergreen and methyl salicylate, the reagents used consist of sulphuric acid, to which has been added a small amount of an alcoholic solution of heliotropin, and sulphuric acid to which has been added an aqueous solution of chloral.—Am. Perf. 1917, v. 12, p. 202.

Rippetoe, J. R.: A simple test for distinguishing methylsalicylate from the oils of gaultheria and sweet birch depends on the froth resulting from agitation. Any froth produced by shaking immediately disappears on methylsalicylate, while on the oils of gaultheria and sweet birch it will remain for quite a few seconds.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

Allbright, Allen R.: A description of a method for the detection of phenolic impurities in methylsalicylate. J. Am. Chem. Soc. 1917, v. 39, p. 820–825.

Hortvet, Julius: Of six samples of wintergreen extract examined, two were rejected. —Rep. Minnesota D. & F. Com. 1917, p. 53.

Leone, G.: Methylsalicylate, when given, either orally or by hypodermic injection, has a marked influence on the biliary secretion. The percentage of total solids and of ash, also the viscosity and surface-tension of the bile, are lessened, but the total amount secreted is increased.—Pharm. J. 1917, v. 98, p. 439 from Chem. Abstr. 1917, v. 11, p. 995.

METHYLTHIONINÆ CHLORIDUM.

Tomioka, I.: A description of a method for preparing methylene blue from dimethylaniline.—J. Chem. Ind., Tokyo, 1917, v. 20, p. 1–2.

Dohme, A. R. L.: Of 17 samples of methylene blue examined, one had no appreciable ash, five showed 0.2 per cent to 0.88 per cent, and the remainder varied from 1.15 per cent to 25.3 per cent. All but the first five were unsatisfactory.—Proc. N. W. D. A. 1917, p. 510.

Scoville, W. L.: One sample of methylene blue examined yielded 49.6 per cent of ash.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Dohme, A. R. L.: One shipment of methylene blue examined was rejected because it contained about 5 per cent of zinc.—Proc. N. W. D. A. 1917, p. 521.

Monnier, A.: In a paper on the use of methylene blue as a reagent in chemical analysis, a method for applying it in the detection and estimation of periodates in Chili saltpeter is described. An abstract.—Analyst, 1917, v. 42, p. 51.

Tribondeau: A method for the detection of methylene blue in urine consists of acidifying the latter with citric acid, adding a small amount of thymol, and boiling the mixture. The thymol collects on the surface carrying with it the pigment.—Compt. rend. soc. biol. 1917, v. 80, p. 882.

MISTURA CHLORALIS ET POTASSII BROMIDI COMPOSITA, N. F.

Anon.: Comments on the N. F. method of preparing the compound mixture of chloral and potassium bromide.—N. A. R. D. J. 1917, v. 23, p. 941.

MISTURA CRETÆ.

Hommell, P. E.: The chalk mixture of the U. S. P. should be improved by adopting the following formula: Prepared chalk, 15 gm.; acacia in fine powder, 10 gm.; glycerin, 15 mils; cinnamon water, 150 mils; distilled water, sufficient to make 150 mils.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

MISTURA GLYCYRRHIZÆ COMPOSITA.

Hommell, P. E.: The compound mixture of glycyrrhiza can be improved. The gum acacia and spirit of nitrous ether in the formula are incompatible, resulting in precipitation. The acacia should be omitted, as it is of doubtful value in this preparation. Glycerin should be substituted, as it is a much better demulcent for the upper air passages. The sugar should be discarded, as it induces fermentation and upsets the stomach.—Proc. New Jersey Pharm. Assoc. 1917, p. 81.

MISTURA OPII ET RHEI COMPOSITA, N. F.

Raubenheimer, Otto: An improved formula for the preparation of sun cholera mixture.—Western Druggist. 1917, v. [illegible], p. [illegible].

MISTURA RHEI ET SODÆ.

Hommell, P. E.: The amount of glycerin in the mixture of rhubarb and soda should be reduced. At present, when a patient takes a teaspoonful of this compound, one third of the dose is glycerin.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

MISTURA SASSAFRAS ET OPII, N. F.

Baker, Harry L.: Of two samples of Godfrey's cordial examined, one was rejected for being below standard.—Rep. Tennessee F. & D. Dept. 1917, p. 15.

MORPHINA.

Carles, P.: Notes on the nature of the insoluble morphine present in crude opium.—[illegible] 1917, v. [illegible], p. [illegible].

Anon.: The quantity of morphine hydrochloride and sulphate imported by Japan during 1916 amounted to [illegible] ounces, as compared with 358,543 ounces imported in 1915, and 180,760 ounces imported in 1914.—Chem. & Drug. 1917, v. 89, p. 305.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not morphine nitrate and acetate deteriorate, and also if they are desirable and necessary salts.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

Rassers, J. R. F.: Observations on the specificity of the Straub-Herrmann biologic reaction for the identification of morphine. It was found that cocaine, caffeine, diuretin, camphor, picrotoxin, and tetanus toxin also give this reaction.—Physiol. Abstr. 1917, v. 2, p. 189.

Tunmann, O.: A description of a microchemical method for the differentiation of morphine and codeine. The method is based on the fact that morphine and codeine yield crystalline salts with hydriodic acid, which are different in form and therefore permit of the differentiation of the two bases. Apoth.-Ztg. 1916, v. 31, p. 148-150, through Analyst, 1917, v. 42, p. 48.

Rakshit, J. N.: A method for the titration of morphine with iodic acid is described. The method can not be employed for the estimation of morphine in opium, since codeine, narcotine, and other substances contained in opium interfere.—J. Soc. Chem. Ind. 1917, v. 36, p. 989–990.

Heiduschka, A., and Faul, M.: Descriptions of colorimetric methods for the estimation of very small quantities of morphine are given. These methods are based on the use of George's and Gascard's iodic acid reagent and Marquis's reagent.—Arch. Pharm. 1917, v. 255, p. 172–191, through J. Chem. Soc. 1917, v. 112, part 2, p. 554.

Emery, W. O.: A description of a method for the estimation of caffeine, acetanilid, quinine, and morphine in mixtures containing these substances.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 73-74.

Miller, M. R.: A description of a rapid method for the determination of small quantities of acetomorphine.—Ann. chim. analyt. 1917, v. 22, p. 59.

Faltis, F.: A critical review of most of the work dealing with the constitution of morphine, with an explanation for conflicting results.—J. Chem. Soc. Lond. 1917, v. 112, p. 411.

von Braun, J., et al.: A report of further researches dealing with the constitution and physiological activity of the morphine alkaloids.—J. Chem. Soc. 1917, v. 112, part 1, p. 163 164 and 281.

Mannich, C.: Researches on the chemical constitution of morphine, with special reference to the methyl derivatives of morphine.—Arch. Pharm. 1916, v. 254, p. 349–363, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 473–475.

Macht, David I.: A note on the absorption of apomorphine and morphine through the conjunctiva.—J. Am. M. Assoc. 1917, v. 68, p. 1230.

Biberfeld, Johannes: A report of researches to determine the mechanism of tolerance to morphine acquired by the system on repeated administration of morphine.—Biochem. Ztschr. 1916, v. 77, p. 283–297, through J. Chem. Soc. Lond. 1917, v. 112, part i, p. 106.

Wu Lien-Teh: The menace of morphine to China.—Lancet, 1917, v. 192, p. 874–875.

MORPHINÆ HYDROCHLORIDUM.

Schaefer, K., and Stich, C.: A note on the changes which take place in solutions of morphine hydrochloride upon sterilization in ampoules.—Apoth. Ztg. 1917, p. 274, through Pharm. Weekblad 1917, v. 54, p. 1459.

MOSCHUS.

Anon.: Notes on the source and quality of the different commercial varieties of musk.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 140–141.

MUCILAGO ACACIÆ.

Lascoff, J. Leon: The omission of limewater in the mucilage of acacia, U. S. P. IX, is an improvement as it will discourage the pharmacist from keeping large quantities of this preparation on hand, and will avoid the incompatibilities resulting from the presence of the limewater.—Am. Druggist 1917, v. 65, No. 5, p. 25.

MUCILAGO SASSAFRAS MEDULLÆ, N. F.

DeG. Peacock, Josiah C., and Bertha L.: A presentation of experimental data concerning the preparation of the mucilage of sassafras pith, and on its keeping qualities.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 171–185.

MUCILAGO TRAGACANTHÆ.

Nicholson, Malcolm: The tendency for fungus to grow in the mucilage of tragacanth is probably due to the presence of CO_2. To prevent the growth of fungus in this mucilage, use only distilled water which has been recently boiled.—Pharm. J. 1917, v. 98, p. 402.

MULLÆ.

Beringer, George M.: The title "mull" is applied by the N. F. to ointments of high fusing point which are to be spread on soft muslin mull, and then applied like a plaster.—Proc. New Jersey Pharm. Assoc. 1917, p. 92.

Smith, F. A. Upsher: The class of "Unguenta Extensa" is now known by the shorter name mulls—a name first used by Unna, the originator of this group of preparations.—Proc. Minnesota Pharm. Assoc. 1917, p. 172.

MYRRHA.

Farwell, Oliver Atkins: Myrrh is said to come from one or more species of *Commiphora*. The oldest name and consequently the valid one is *Balsamea*. It should be adopted.—Drug. Circ. 1917, v. 61, p. 175.

Southard, Addison E.: The myrrh on the Aden market is stated to be obtained from Abyssinia and the Arabian hinterland, that from the former country being considered the best.—Com. Rep. 1917, No. 24, p. 377.

Dohme, A. R. L.: Samples of myrrh examined showed alcohol-soluble constituents of 32.4 per cent, 35.1 per cent, and 48.4 per cent, respectively.—Proc. N. W. D. A. 1917, p. 510.

Engelhardt, H.: The alcohol-soluble constituents of six samples of myrrh examined ranged from 27.4 to 38.6 per cent. The ash content varied from 3.8 to 7.6 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Green, C.: Seven lots of myrrh examined yielded 27.5 per cent, 32.9 per cent, 33.2 per cent, 34.1 per cent, 36 per cent, 39.9 per cent, and 50 per cent alcohol-soluble matter, respectively. Thus, three were above and four below the U. S. P. requirement of not less than 35 per cent of alcohol-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 87.

NEBULA AROMATICA, N. F.

Brown, L. A.: Nebula or oil sprays are a new class of preparations added to the N. F., IV. There are five of them—aromatic oil spray, eucalyptol, menthol, compound menthol, and thymol oil sprays.—Bull. Kentucky Agric. Exper. Sta. 1917, Feb. 15, p. 38.

Anon.: Notes on the preparation of aromatic oil spray.—N. A. R. D. J. 1917, v. 23, p. 765.

NITROGENII MONOXIDUM.

Tuckey, H. A.: A résumé of experiences with nitrous oxide-oxygen analgesia and anesthesia.—Dental Cosmos, 1917, v. 59, p. 400–405.

Casto, Theodore D.: An experimental study of the changes produced in the blood by nitrous oxide-oxygen anesthesia.—Dental Cosmos, 1917, v. 59, p. 415–432.

NUX VOMICA.

Hill: The seed of *Strychnose angustifolia*, *S. donnaiensis*, and *S. usitata* contain varying amounts of strychnine, and their possible presence in commercial samples of *S. nux vomica*, may account for the observed differences in the activity of the latter.—Chem. & Drug. 1917, v. 89, p. 43.

[illegible], J. G.: Every lot of nux vomica examined contained more alkaloid than the U. S. P. standard. The results ranged from 2.2 per cent to 2.9 per cent of total alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 88.

Anon.: Of 23 samples of nux vomica assayed, the alkaloidal content of 14 was above standard and 9 below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

OLEATUM HYDRARGYRI.

Adler, Philip: An assay process for the determination of the mercury content of the oleate of mercury should be included in the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

Beringer, George M.: The use of alcohol in place of water in the preparation of the oleate of mercury shortens the time necessary to complete the finished product and diminishes the danger of oxidizing the mercury.—Am. J. Pharm. 1917, v. 89, p. 352.

OLEORESINA.

Beringer, George M.: In the U. S. P. VIII, acetone was directed to be used in the preparation of the oleoresins on account of its cheapness. As it is now permissible to use denatured alcohol in the manufacture of ether, the latter can be made so cheaply that it has replaced acetone in the manufacture of this class of preparations in the U. S. P., IX.—Am. J. Pharm. 1917, v. 89, p. 14–15.

OLEORESINA ASPIDII.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association states that the oleoresin of male fern placed on the market is a much inferior product. An assay process for filicin is desired.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Santi, Luigi: The method of the Ph. Helv. IV for the assay of the oleoresin of male fern is described and discussed.—Boll. chim. farm. 1917, v. 56, p. 519–520.

Dohme, A. R. L.: Several samples of oleoresin male fern examined contained acetone. The percentage of crude filicin was less than 20 per cent, whereas a good product should contain from 26 to 28 per cent crude filicin.—Proc. N. W. D. A. 1917, p. 507.

Engelhardt, H.: Four samples of oleoresin of male fern yielded 19.2, 21.4, 22, and 24.4 per cent, respectively, of crude filicin when assayed by Fromme's method. Good oleoresin of male fern should contain 27 to 28 per cent. It would be advisable that the U. S. P. give an assay process for this product.—J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

OLEORESINA CUBEBÆ.

Santí, Luigi: A method for the evaluation of the oleoresin of cubeb is described. Cubebic acid is precipitated with calcium chloride in the presence of ammonia and the resulting precipitate, which is stated to be calcium salt of cubebic acid, is dried and finally weighed.—Boll. chim.-farm. 1917, v. 56, p. 521.

OLEA PINGUA.

Pigulevski, G. V.: An investigation of the influence of climatic conditions on the composition of plant oils.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 324–341, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 189.

Gardner, Henry A.: A tabulation of data showing the changes in the physical and chemical constants of vegetable and animal oils due to storage. -Oil, Paint & Drug Rep. 1917, v. 92, No. 9, p. 62.

Pickard, Glenn H.: Short notes on the production of some edible vegetable oils: Olive oil, cottonseed oil, peanut oil, corn oil, coconut oil, soya bean oil, palm kernel oil, and sesame oil.—Am. Food. J. 1917, v. 12, p. 668–672.

LeNaour, P.: A note on the neutralization of oils in general and olive oil in particular by the Rouhaud process. The neutralizing agent employed is $Na_2CO_3.10H_2O$ dissolved in 0.1 of its weight of water at 40° C. -J. pharm. et chim. 1917, v. 16, p. 243–246.

Fahrion, W.: A review of the developments in the chemistry and the analysis of fats during the year 1916.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 125–128, 138–140, 142–144, 147–148, 150–152, 157–159.

Alexander, Joh.: A review of the advances made in the fat, soap, and perfume industries in 1915.—Deut. Parfumerie-Ztg. 1916, v. 2, p. 65–66, 100–102, through Chem. Abstr. 1917, v. 11, p. 1014.

Anon.: Tentative standard methods for the sampling and analysis of commercial fats and oils, other than those of coconut, butter, and linseed group, adopted by the committee on the analysis of commercial fats and oils of the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society are presented.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1066–1070.

Houston, B. F.: A list of standards and definitions for edible vegetable fats and oils as adopted by the joint committee on definitions and standards.—S. R. A.-Chem. 1917, No. 19, p. 49–50.

Engelhardt, H.: A list of German substitutes for fats and oils, with directions for preparing the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 56–59.

Chéneveau, C.: Certain data showing the relation between the index of refraction and the chemical constitution of fats are presented.—Compt. rend. Acad. sci. 1917, v. 165, p. 1060–1062.

Herzog. Some observations on the determination of the melting point of fats.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 325.

Gill, A. H. The author has attempted to make use of the fact that different soap stocks require varying amounts of salt for salting out to develop a quantitative method for testing the purity of oils.—J. Ind. & Eng. Chem. 1917, v. 9, p. 136.

Marden, J. W., and Dover, M. V. A description of a proposed method for the calorimetric determination of the sulphuric acid, or Maumené number of fats and oils.—J. Ind. & Eng. Chem. 1917, v. 9, p. 858–860.

Issoglio, Giovanni. A new method for determining the degree of rancidity of fats consists of determining the oxidizability number. By the oxidizability number is meant the quantity of oxygen necessary to oxidize the volatile matter in 100 grams of oil or fat.—Giorn. farm. chim. 1917, v. 66, p. 225–230; Ann. chim. applicata 1917, v. 7, p. 187–192.

[illegible]. A method for determining the sulphuric-acid index of fatty oils is described in detail. Data of this nature obtained for various oils are presented.—Oil, Paint & Drug Rep. 1917, v. 92, No. 28, p. 33.

Holde, D. A note on the use of a mixture of equal volumes of chloroform and alcohol instead of absolute alcohol in the estimation of hydroxy fatty acids in fats and oils.—Chem. Ztg. 1917, v. 41, p. 493; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 420.

[illegible]. A description of a rapid method for the analysis of oils intended for use in the manufacture of soaps.—Bull. soc. chim. France, 1917, v. 21, p. 101–103.

Prescher, J. A note on the separation of phytosterol and cholesterol from fats and oils by the digitonin precipitation method of Marcusson and Schilling.—Ztschr. Unters. Nahr. u. Genussm. 1917, v. 33, p. 77–80; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 275–276.

Zwikker, J. J. L. A method for the separation of sterols from fats is described. Expensive digitonin is replaced by a solution of lithium [illegible] in pyridine.—Pharm. Weekblad. 1917, v. 54, p. 101–107.

Wilson, John M. A description of an improved method for the estimation of unsaponifiable matter in oils, fats, and waxes.—Analyst, 1917, v. 42, p. 200–202.

Gill, A. H. The color reaction for palm oil described by Crampton and Simons is criticised on the grounds that it is a test for carotin and therefore will yield positive results with any oil containing the latter.—J. Ind. & Eng. Chem. 1917, v. 9, p. 136–139.

de Jong, D. J. An investigation of the Jean method, the Franz-Adler method, and the solidification point method for detection of peanut oil in oils and fats are given.—Pharm. Weekblad, 1917, v. 54, p. 1297–1298.

Margosches, B. M.: A method for the detection of rapeseed oil is based on the catalytic reduction of erucic acid.—Seifenseider-Ztg. 1917, v. 44, p. 91, through Chem. Zentralbl. 1918, v. 89, part 1, p. 776.

Normann, W., and Hugel, E.: Methods for the identification of hardened marine animal oils and rape oil are described.—Chem. Umschau, 1916, v. 13, p. 131–133, through J. Soc. Chem. Ind. 1917, v. 36, p. 658.

Tortelli, M., and Jaffe, E.: A description of a color reaction for distinguishing between fish oils and vegetable oils.—Hyg. Rundschau, 1916, p. 647, through Pharm. Weekblad, 1917, v. 54, p. 58.

Bolton, E. R., and Hewer, D. G.: Data are presented in the form of a table showing the physical and chemical constants of a number of fixed oils obtained from the seeds of Brazilian plants.—Analyst, 1917, v. 42, p. 35–45.

Pieraerts, J.: The composition and chemical and physical constants of oil of "sele"—an oil obtained from the seeds of a plant closely related to *Citrullus vulgaris*.—Bull. Sc. pharmacol. 1917, v. 24, p. 204–210.

Hewer, Dorothy G.: Analytical data relative to the physical and chemical constants of a fixed oil from orange pips are presented. The oil is stated to be easily saponifiable, and that it should prove suitable for the manufacture of soap and glycerol.—Analyst, 1917, v. 42, p. 271–273.

Pieraerts, J.: Analytical data showing the physical and chemical constants of the oil obtained from sanga-sanga nuts are given. The plant yielding these nuts is found in the lower Congo. An abstract.—Analyst, 1918, v. 43, p. 295.

Lackey, D. H., and Sayre, L. E.: An account of experiments in the hydrogenation of corn oil.—J. Am. Pharm. Assoc. 1917, v. 6, p. 348–351.

Scrauth, W.: Attention is directed to the possibility of employing the Varrentrapp reaction in the hydrogenation of unsaturated fats and oils. An abstract.—Analyst, 1917, v. 42, p. 91.

Langworthy, C. F., and Holmes, A. D.: Studies on the digestibility of some vegetable and animal fats.—U. S. Dept. Agric. Bull. 1917, No. 505 and 507.

OLEUM ADIPIS.

Windrath, R.: Notes on the use of olein in the manufacture of pharmaceutical preparations.—Pharm. Weekblad, 1917, v. 54, p. 339, from Apoth.-Ztg. 1917, p. 71.

OLEUM AMYGDALÆ EXPRESSUM.

Issoglio, Giovanni: Data showing the oxidizability number of different samples of expressed oil of almond are presented. –Giorn. farm. chim. 1917, v. 66, p. 246.

Lea, E. J.: One sample of sweet almond oil examined proved to be an imitation product.—Rep. California Bd. Health, 1917, p. 150.

OIL, CHAULMOOGRA (NONOFFICIAL).

Brill, Harvey C., and Williams, Robert R.: A tabulation of the physical and chemical constants of 10 samples of chaulmoogra oil, and a discussion of the use of various fractions of chaulmoogra oil in the treatment of leprosy.—Philippine J. Sc. 1917, v. 12, sec. A, p. 207–220.

Brill, Harvey C.: A chemical investigation of the oil obtained from the seeds of *Pangium edule* and *Hydnocarpus alcalae*, with reference to their use as substitutes for chaulmoogra oil.—Philippine J. Sc. 1917, v. 12, sec. A, p. 37–46.

Valenti, Adriano: A report of an investigation to determine the pharmacological action of chaulmoogra oil. The first part of the report deals with the origin and botanical description of the plant from which chaulmoogra oil is obtained, and the physical and chemical properties of the oil.—Arch. farmacol. sper. 1917, v. 24, p. 23–32, 33–49, 65–78.

OLEUM GOSSYPII SEMINIS.

Anon.: The joint committee on definitions and standards adopted the following definition for cottonseed oil: Cottonseed oil is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum* L.) or from the seed of other species of Gossypium.—Chem. Abstr. 1917, v. 11, p. 896.

Beneschowsky, A.: The percentage of oleic acid in cottonseed oil was found to range from 2.43 to 6.08.—Chem. Zentralb. 1916, v. 1, p. 1274.

Rast, L. E.: Data relative to the oil content of cotton seed are presented. The results obtained in 500 determinations showed that the oil content is an inherent characteristic of the variety and can be increased by selection.—Science, 1917, v. 45, p. 507–508.

Langworthy, C. F., and Holmes, A. D.: A report of investigations to determine the digestibility of cottonseed oil, olive oil, peanut oil, coconut oil, sesame oil, and cacao butter.—Bull. U. S. Dept. Agric. 1917, No. 505, p. 1–19.

OLEUM LINI.

Weiss, A.: A discussion of the sources of linseed oil, its properties and method of purification by refining and bleaching.—Seifenfabrikant, 1916, v. 36, p. 601–603, 617–619.

Holley, C. D.: A discussion of specifications for linseed oil.—Proc. Am. Soc. Testing Materials, 1916, v. 2, p. 239–247, through Chem. Abstr. 1917, v. 11, p. 405.

Anon.: A book review calls attention to a monograph by J. Newton Friend entitled *The Chemistry of Linseed Oil*.—Pharm. J. 1917, v. 99, p. 306.

Friend, John A. N.: An investigation of the effect of heat and oxidation on linseed oil.—J. Chem. Soc. Lond. 1917, v. 111, p. 162–167.

Sacher, J. F.: When granular boneblack is added to mineral oils the layer of black material shows a decided Paris blue color when viewed in reflected light. By this means 3.5 to 4 per cent of mineral oil can be detected in linseed and rapeseed oils.—Farben-Ztg. 1916, v. 21, p. 1012, through Chem. Abstr. 1917, v. 11, p. 1322.

Table showing some of the analytical results reported for linseed oil.

Reporter.	Number of samples.		References.
	Examined	Rejected.	
Barnard, H. E.	7	2	Bull. Indiana Bd. Health, 1917, v. 20, p. 159 & 221.
Casey, F. W.	11	7	Bull. Michigan D. & F. Dept. 1917, No. 260-261, p. 33 and No. 262-263, p. 13.
Hortvet, Julius	12	6	Rep. Minnesota D. & F. Com. 1917, p. 25.
Indiana Board of Health	16	3	J. Am. Pharm. Assoc. 1917, v. 6, p. 412.
Sayre et al.	3	1	Rep. Kansas Bd. Health, 1916, v. 12, p. 429.

OLEUM MORRHUÆ.

Scoville, W. L.: It has been difficult to obtain cod liver oil of satisfactory quality. Most samples are dark in color and unpleasant in taste. It is impossible to insist on a high grade of oil at the present time and secure supplies.—J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Anon.: New regulations in Newfoundland require that all refined cod liver oil be inspected before exportation, and be branded as "nonfreezing cod liver oil for human consumption," and "refined cod liver oil for human consumption."—Bull. Imp. Inst. 1917, v. 15, p. 582.

Bull, Henrik: Researches on the composition of cod liver oil. On bromination, a product consisting of a mixture of $C_{20}H_{30}Br_{10}O_2$ and $C_{20}H_{28}Br_{12}O_2$ was obtained.—Tidskr. Kemi, Farm. Therapi, 1917, v. 14, p. 1–2.

Chapman, A. C.: A sample of cod liver oil, which was thought to be adulterated with petroleum oil on account of its high hydrocarbon content was found to contain oil from the livers of fish, belonging to the *Spinacidæ* or *Squalidæ*. Oils obtained from the livers of certain fish belonging to this family contain a high percentage of hydrocarbon. The author proposes the name of spinacene for the hydrocarbon isolated. -Analyst, 1917, v. 42, p. 161-168.

Fuller, H. C.: The chemical tests for cod liver oil are really characteristic of the oils from the fresh livers of fish in general.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

Condelli, S.: A description of a method for the detection of mineral oils, vaselin, and paraffin in fish oils. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 174; Boll. chim.-farm. 1917, v. 56, p. 97-98.

Longhi, G. Cod liver oil which is of a reddish or brownish-yellow color should not be used in medicine, since it is almost certain to have undergone some decomposition and will show a high oxidizability value. Data showing the color, acid value, iodine value, and oxidizability value of samples of cod liver oil of different origin are presented in tabular form.—Giorn. farm. chim. 1917, v. 66, p. 249-250; Ann. chim. applicata, 1917, v. 7, p. 187-199.

Dohme, A. R. L. Some of the samples of cod liver oil examined were of high grade, but that of satisfactory quality is not easy to obtain.—Proc. N. W. D. A. 1917, p. 510.

Richmond, H. D., and Hackman, F. G. A description of a specific gravity method for the rapid determination of cod liver oil in malt and oil preparations.—J. Soc. Chem. Ind. 1917, v. 36, p. 273.

Boehringer, C. F. Norwegian patent No. 27521. A method for the extraction of biologically important nitrogenous substances from cod liver oil.—Chem. Abstr. 1917, v. 11, p. 1729.

OLEUM OLIVÆ.

Anon. The joint committee on definitions and standards adopted the following definition for olive oil: Olive oil (sweet oil) is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea L.*).—Chem. Abstr. 1917, v. 11, p. 896.

Hurst, Carl B. Spanish law forbids the adulteration of olive oil intended for exportation from Spain. Hence the olive oil of Spain is in a measure guaranteed by the government as to its purity.—Com. Rep. 1917, No. 42, p. 677.

Castoldi, A. An investigation of the effects of acidity and rancidity on the index of refraction of olive oil. Although free fatty acids were found to lower the value, rancidity caused it to increase.—Staz. sper. agr. ital. 1916, v. 49, p. 577-587, through Chem. Abstr. 1917, v. 11, p. 2124.

Rippetoe, J. R. It is desirable that the Pharmacopoeia specify a limit of free acid in olive oil.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

Cordier, G., and Lesure, A. A description of a new process for removing the rancidity from olive oil in order to obtain a product sufficiently pure to be employed in the preparation of camphorated oil for injection.—J. pharm. et chim. 1917, v. 15, p. 369-382.

Astruc, A., and Cambe, J. Remarks on the article by G. Cordier and A. Lesure on the purification of olive oil intended for use in the preparation of injections.—J. pharm. et chim. 1917, v. 16, p. 241-243.

LeMeur, P. A note on the neutralization of oils in general, with particular reference to the procedure of Roussaud for the neutralization of olive oil.—J. pharm. et chim. 1917, v. 16, p. 244-246.

Issoglio, Giovanni: Data showing the oxidizability number of different samples of olive oil are presented.—Giorn. farm. chim. 1917, v. 66, p. 246.

Wingard, A.: A note on the influence of camphor on the Valenta number. Each per cent of camphor added to the mixture of olive oil and acetic acid depresses by two degrees the temperature at which turbidity sets in.—Svensk farm. Tidskr. 1917, v. 21, p. 289-293.

Lund, R.: A description of a method for the quantitative determination of peanut oil in olive oil. The method is based on the difference in the crystallization temperature of alcoholic fatty acid mixtures of pure olive oil and pure peanut oil.—Am. Perf. 1917, v. 12, p. 89.

Hortvet, Julius: Of 32 samples of olive oil examined, 6 were rejected.—Rep. Minnesota D. & F. Com. 1917, p. 25.

Lea, E. J.: Eight samples of olive oil were rejected, as they contained cottonseed oil.—Rep. California Bd. Health, 1917, p. 150.

Price, J. D.: Twenty-eight samples of olive oil tested were of U. S. P. quality.—Bull. Georgia Dept. Agric. 1917, v. 4, No. 1, p. 15–17.

Roberts, J. G.: One sample of olive oil examined was rejected on account of its high saponification and acid numbers.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 88.

Anon.: Notices of judgment Nos. 4776 and 4784 relate to the adulteration of olive oil.—S. R. A.-Chem. 1917, p. 349 and 357.

Asnis, Eugene J.: A report of researches dealing with the therapeutics of olive oil.—New York M. J. 1917, v. 105, p. 215–216.

OLEUM RICINI.

Lemberger, Joseph L.: An account of the author's experience in the cultivation of the castor oil plant and of the possibilities of extending the culture of the plant to commercial proportions.—Am. J. Pharm. 1917, v. 89, p. 218–221.

Issoglio, Giovanni: Data showing the oxidizability number of different samples of castor oil are presented.—Giorn. farm. chim. 1917, v. 66, p. 247–248.

Fahrion, W.: Analytical data relative to the identity and properties of the acids present in castor oil are presented and discussed.—Chem. Zentralbl. 1916, v. 2, p. 580, through Chem. Abstr. 1917, v. 11, p. 1325.

Jones, R. O.: Notes on the splitting of castor oil and on the constitution of ricinoleic acid.—Am. Perf. 1917, v. 12, p. 187–188, 217–218.

Brightman, R.: An investigation of the action of nitric acid on castor oil.—J. Soc. Chem. Ind. 1917, v. 36, p. 984–985.

Lea, E. J.: One sample of castor oil examined contained saccharin.—Rep. California Bd. Health, 1917, p. 150.

OLEUM SESAMI.

Farwell, Oliver Atkins: The proper binomial for the designation of sesame is *Sesamum orientale* Lin.; not *Sesamum indicum* Lin.—Drug. Circ. 1917, v. 61, p. 175.

Anon.: The joint committee on definitions and standards adopted the following definition for sesame oil: Sesame oil (Gingili oil, teel oil, benne oil) is the edible oil obtained from the seed of the sesame plant (*Sesamum indicum*, De Candolle; *Sesamum radiatum*, Schum and Thonn; *Sesamum orientale* L.).—Chem. Abstr. 1917, v. 11, p. 896.

Langworthy, C. F., and Holmes, A. D.: A report of experiments to determine the digestibility of sesami and other oils.—Bull. U. S. Dept. Agric. 1917, No. 505, p. 1–19.

OLEUM THEOBROMATIS.

Anon.: The joint committee on definitions and standards adopted the following definition for cacao butter: Cacao butter is the edible fat obtained from sound cacao beans (*Theobroma cacao* L.), either before or after roasting.—Chem. Abstr. 1917, v. 11, p. 896.

Debourdeaux, Leon: A description of tests for the identity and purity of cacao butter.—Farm. Españ. 1917, v. 49, p. 468–470.

Fuller, H. C.: The U. S. P. IX limits the source of oil of theobroma to the seeds, but the shells of the coco bean contain an oil of practically the same composition, which can be used for the same purposes.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

Issoglio, Giovanni: Data showing the oxidizability number of various samples of oil of theobroma are presented.—Giorn. farm. chim. 1917, v. 66, p. 248.

Dreymuth, H.: A substitute for coco butter consists of 36 parts of fresh anhydrous butter fat, 15 parts of spermaceti and 3.5 parts of anhydrous wool fat.—Pharm. Post, 1917, v. 50, p. 301.

OLEUM TIGLII.

Carles: A description of a physiological method for the detection of croton oil.—J. pharm. et chim. 1917, v. 14, p. 38.

OLEA VOLATILIA.

Anon.: A table showing the production of volatile oils in the United States for the years 1899, 1909, and 1914.—Am. Perf. 1917, v. 12, p. 18.

Stockberger, W. W.: The production of volatile oils in the United States.—Simmons's Spice Mill, 1917, v. 40, p. 692–695.

Anon.: The production of essential oils in the United States.—Tea and Coffee Trade J. 1917, v. 32, p. 530; through Chem. Abstr. 1918, v. 12, p. 600.

Udale, George W.: Notes on the use of essential oils in medicine, including a table showing the number of times such oils were called for in 25,000 written prescriptions.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 39–40.

Anon.: A review of the preparation of natural and synthetic odoriferous bodies with special reference to their production in the British Empire and allied countries. -Perf. & Ess. Oil Rec. 1917, v. 8, p. 116–156.

Anderson, George E.: A consular report on the exportation of essential oils from Hongkong for the year 1916.—Com. Rep. 1917, No. 128, p. 838.

Anon.: Remarks concerning some of the essential-oil plants of British Columbia.- Perf. & Ess. Oil Rec. 1917, v. 8, p. 52–53.

Anon.: Notes on the essential-oil industry of Australia.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 101–170.

Honey, Robertson: A consular report on the essential-oil industry of eastern Sicily.—Com. Rep. 1917, No. 77, p. 19.

Srivastave, J. P.: A short survey of the developments in essential-oil distillation and perfumery production in India.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 188–190.

Parry, E. J.: An editorial comment on the production of essential oils in British East Africa.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 263–264.

Anon.: A review of the work of Baker and Smith on the essential oils of Australian plants, with special reference to those which have commercial value. -Perf. & Ess. Oil Rec. 1917, v. 8, p. 99.

Anon.: A discussion of the genesis, development, and functions of essential oils in plants.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 43–46.

Prinz, H. J.: In a discussion of the relationship between odor and chemical constitution, the author attributes the odoriferous properties to what he designates the "osmophoric group." He also discusses the effect of the position of a double link on the osmophoric character.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 222–223.

Backman, E. L.: A discussion of the relation of the odoriferous properties of substances to their solubility in water and in oil. In order that a substance may be odorous it must be soluble both in water and in lipoids, since the cells of the receptor organs of smell are covered with a watery fluid, while they themselves contain lipoid granules.—J. physiol. et path. gén. 1917, v. 17, p. 1–4.

Reclaire, A.: A review of the advances made in the chemistry of the essential oils and terpenes during 1914 and 1915. Numerous references to the literature are given and a bibliography of patent references is appended. Chem.-Ztg. 1916, v. 40, p. 977–978, 987–989, 1000–1001, 1019–1022, through Chem. Abstr. 1917, v. 11, p. 684.

Scoville, W. L.: Artificial substitutes for the natural oils are increasing. The oils of coriander, rose, neroli, and cinnamon (Ceylon) are mostly of the artificial variety. It is needless to say that they are not as satisfactory as the natural oils, but the latter are not always obtainable. —J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Pigulevski, G. V.: Tables showing the rotations, dispersion coefficients, and specific gravities of the ethereal oils of rue, rosemary, tansy, hyssop, laurel, and sage distilled in Russia.—J. Russ. Phys. Chem. Soc. Proc. 1916, v. 48, p. 1047–1048, through Chem. Abstr. 1917, v. 11, p. 3380.

Prins, H. J.: A review of the progress made in the analyses of essential oils during 1916.—Olie en Vetten, 1917, v. 2, p. 1–2 and 69–70, through Chem. Weekbl. 1917, v. 14, p. 977.

Durrans, Thomas H.: A continuation of an article entitled *A Critical Survey of Technical Essential Oil Analysis.*—Am. Perf. 1917, v. 11, p. 320–321.

Nelson, E. K.: Directions for the identification of volatile oils and their derivatives in the analysis of medicinal preparations.—J. Am. Pharm. Assoc. 1917, v. 6, p. 543–548.

Guglialmelli, Luis: A report of the results obtained in testing a large number of volatile oils for phenols with the author's arsenotungstic and arsenotungstomolybdic reagents.—Anales soc. quim. Argentina, 1917, v. 5, p. 11–23.

[illegible], J. J.: A new reagent for essential oils consists of a hydrochloric acid solution of vanillin. The reagent may be employed for the detection of small quantities of volatile oils in medicaments, cosmetics, perfumes, etc., or for the determination of the purity of essential oils.—Anales soc. españ. fis quim. v. 13, p. 46–54, through Am. Perf. 1917, v. 12, p. 45.

Anon.: From experiments it is concluded that in the acetylation of essential oils for the determination of alcohols, the results obtained vary according to the properties of acetic anhydride and anhydrous sodium acetate used.—Perf. & Ess. Oil Rec. 1916, v. 7, p. 374.

Prins, H. J.: A simple method for demonstrating the effect of acids in the addition of water to terpineol.—Chem. Weekbl. 1917, v. 14, p. 630–631.

Anon.: Notes on the investigation of some essential oils produced in India—namely, eucalyptus oil, geranium oil, and wintergreen oil.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 326–329.

Anon.: An account of the distillation of geranium oil in India, reprinted from the Indian (Government) Trade Journal.—Am. Perf. 1917, v. 12, p. 261.

Pigulevski, G. V.: Notes on the chemical composition of certain essential oils of Russian origin.—Exper. Sta. Rec. 1917, v. 36, p. [illegible].

Asahina, Y., and Yoshitomi: A report of a study of the chemistry of the oil of Japanese [illegible].—J. Pharm. Soc. Japan, 1917, v. 423, p. 1.

Kremers, Roland E.: Notes on the distillation and physical properties of oil of *Pinus sabiniana.*—J. Am. Pharm. Assoc. 1917, v. 6, p. 11–14.

Lamothe, L.: An abstract of an article on hyssop appearing in Petite Revue d'Antibes. The cultivation of the plant and the distillation of the oil are discussed. Am. Perf. 1917, v. 11, p. 354–355.

Hood, S. C.: A reprint from Bulletin 442, Bureau of Plant Industry, U. S. Department of Agriculture, which deals with the possibility of the commercial production of lemon-grass oil in the United States.—Am. J. Pharm. 1917, v. 89, p. 180–191.

Anon.: A presentation of the physical and chemical constants of lemon-grass oil from Formosa (Hyang-Bow oil).—Am. Perf. 1917, v. 11, p. 321.

Kafaku, Kinzo: A report on the constituents of Formosan lemon-grass oil.—J. Chem. Ind. Tokyo, 1917, v. 20, p. 825–835, through J. Chem. Soc. Lond. 1918, v. 114, part 1, p. 76.

Kafuku, K.: A chemical investigation of the volatile constituents of the leaves of *Alpina nutans*, Roscoe.—J. Chem. Ind. Tokyo, 1917, v. 20, p. 349–353, through J. Soc. Chem. Ind. 1917, v. 36, p. 905.

Komppa, Gust., and Roschier, R. H.: Suggestions for the nomenclature of the fenchenes.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 398.

Anon.: A compilation giving descriptions and physical constants of about 25 of the lesser known constituents of volatile oils.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 72–76.

Radcliffe, L. G.: Short descriptions of some aromatic aldehydes and keystones used in the manufacture of perfumery.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 246–250, 272–275, 320–325.

Wallach, O., et al.: Researches on the chemistry of the terpenes occurring in volatile oils.—Ann. Chem. 1917, v. 414, p. 195–243.

Prins, H. J.: Descriptions of the properties and use in perfumery of normal aliphatic alcohols and aldehydes.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 68–69.

Prins, H. J.: Researches on the composition and properties of citronelal and two isomers of citronelal.—Chem. Weekbl. 1917, v. 14, p. 627–630, 692–695.

Sernagitto, E.: A study of the oxidation of terpenes in the light.—Gazz. chim. ital. 1917, v. 47, part 1, p. 150–153.

OLEUM ÆTHEREUM, N. F.

Kremann, R.: From experiments it is concluded that heavy oil of wine is a mixture of ethyl sulphate, and a compound of ethyl sulphate with unsaturated hydrocarbons.—Monatsh. Chem. 1917, v. 38, p. 53–62, through J. Soc. Chem. Ind. 1917, v. 36, p. 905.

OLEUM AMYGDALÆ AMARÆ.

Farwell, Oliver Atkins: According to the laws of priority the proper designation of bitter almond under *Prunus* is *Prunus Com-*

[illegible] (Lin.) Farwell. It is not necessary to use the variety *amara* for the bitter almond, as it is but a synonym of the species.—Drug Circ. 1917, v. 61, p. 173.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method of assay for oil of bitter almond.—Am. J. Pharm. 1917, v. 89, p. 119.

OLEUM AURANTII.

Hood, S. C., and Russell, G. A.: A report on methods for the production of sweet orange oil, with a description of a new machine for peeling citrus fruits.—Bull. U. S. Dept. Agric. 1916, No. 399, p. 1-19.

Hood, S. C.: On the relative oil yield of Florida oranges. A table showing the yield of a number of different varieties is given.—Am. Perf. 1917, v. 12, p. 297-298.

OLEUM AURANTII AMARI, N. F.

Farwell, Oliver Atkins: The botanical origin of bitter orange should read *Citrus Aurantium* Linné, the "amara" between the words "*Aurantium*" and "Linné" is superflous.—Drug. Circ. 1917, v. 61, p. 231.

OLEUM AURANTII FLORUM, N. F.

Anon.: Notes on the properties of the oil of orange flowers when prepared by different methods.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 129-131.

OLEUM BERGAMOTTÆ, N. F.

Farwell, Oliver Atkins: The words "Linné" and "variety," or its abbreviation "var.," should be inserted between the words "*Aurantium*" and "*Bergamia*." Wight and Arnot describe a variety not a subspecies.—Drug. Circ. 1917, v. 61, p. 231.

Anon.: A short, concise account of the preparation of bergamot oil.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 128-129.

Parry, E. J.: Although bergamot oil generally shows a rotatory power below 20°, the 1916-1917 crop from Messina has a rotatory power of 24-25° or more.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 159.

Reutter: A method for the detection of triacetin when it occurs as an adulterant in oil of bergamot. The method depends on the liberation of glycerin by means of potassium bisulphate and the subsequent conversion of the glycerin into acrolein by means of heat. An abstract.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 183.

Lea, E. J.: Three samples of oil of bergamot examined proved to be imitation products.—Rep. California Bd. Health, 1917, p. 150.

OLEUM CADINUM.

Dohme, A. R. L.: Much of the oil of cade examined was largely adulterated with pine tar.—Proc. N. W. D. A. 1917, p. 521.

OLEUM CAJUPUTI.

Farwell, Oliver Atkins: The proper binomials for cajaput are *Kajuputi Leucadendron* (Lin.) Farwell var. *Augustifolia* (Lin. fil.) Farwell, and *Kajuputi Leucadendron* (Lin.) Farwell var. *Minor* (Sm.) Farwell.—Drug. Circ. 1917, v. 61, p. 175.

Anon.: Notice of judgment No. 4536 relates to the adulteration of oil of cajuput.—S. R. A.-Chem. 1917, p. 51.

OLEUM CASSIÆ.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of oil of cinnamon.—Am. J. Pharm. 1917, v. 89, p. 119.

Anon.: Lead is removed from the oil of cassia by vigorously shaking it with tartaric acid and filtering.—Schimmel's Rep. Oct. 1916, through J. Soc. Chem. Ind. 1917, v. 35, p. 100.

Engelhardt, H.: One lot of cassia oil was rejected because it contained both lead and rosin.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Anon.: Notice of judgment No. 4667 relates to the adulteration of oil of cinnamon.—S. R. A.-Chem. 1917, p. 220.

OLEUM CHENOPODII.

Farwell, Oliver Atkins: The U. S. P. gives the source of the oil of chenopodium as *Chenopodium ambrosiodes anthelminticum* (Linné). The author citation for the variety *anthelminticum* is (Linné) A. Gray. Linneas is not the author of a subspecies *anthelminticum*.—Drug. Circ. 1917, v. 61,p. 175.

Salant, William: The pharmacology of the oil of chenopodium, with suggestions for the prevention and treatment of poisoning.—J. Am. M. Assoc. 1917, v. 69, p. 2016–2017.

Hall, Maurice C., and Foster, Winthrop D.: A preliminary note on the use of oil of chenopodium and chloroform as anthelmintics.—J. Am. M. Assoc. 1917, v. 68, p. 1961–1963.

Walker, Ernest L., and Emrich, William: A report on the treatment of carriers of *Endamœba histolytica* with oil of chenopodium.—J. Am. M. Assoc. 1917, v. 68, p. 1456–1457.

OLEUM EUCALYPTI.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association states that a more convenient form of assay for cineol is desirable.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 184.

Anon.: A short, concise account of the sources of oil of eucalyptus and the development of the industry in the distillation of the oil.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 123–125.

Singh, Puran: A note on the eucalyptus oil industry in the Nilgiris. Data showing the characteristics of the oil obtained are presented.—Indian Forest Records, 1917, v. 5, part 8, p. 1-26, through Chem. Abstr. 1918, v. 12, p. 848.

OLEUM GAULTHERIÆ.

Singh, Puran: An account of the production of wintergreen oil in India. The physical and chemical constants of the oil obtained from *Gaultheria fragrantissima* Wall. are given.—Indian Forest Records, 1917, v. 5, part 8, p. 35-49, through Chem. Abstr. 1918, v. 12, p. 848. See also Com. Rep. 1917, No. 256, p. 440.

Anon.: Notices of judgment Nos. 4596 and 4704 relate to the adulteration of oil of wintergreen.—S. R. A.-Chem. 1917, p. 134 and 265.

OLEUM JUNIPERI.

Engelhardt, H.: A shipment of oil of juniper berries consisted largely of oil of turpentine. It is to be regretted that neither the present nor the forthcoming Pharmacopoeia gives tests to detect any appreciable adulteration of oil of juniper berries with oil of turpentine.—J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

OLEUM LAVANDULÆ.

Farwell, Oliver Atkins: The valid designation of the lavender plant is *Lavandula Spica* Linné, not *Lavandula vera* D. C.—Drug. Circ. 1917, v. 61, p. 175.

Anon.: A short, concise account of the cultivation of lavender flowers and the extraction of the essential oil therefrom.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 122-123.

Parry, E. J.: An African sample of oil of spike lavender has a specific gravity of 0.894 and an optical rotation of −10° 30′. It contained 3 per cent of esters and 44.1 per cent of alcohols.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 263.

OLEUM LIMONIS.

Parry, E. J.: The rotatory power of oil of lemon may vary from +58° to +64°, depending on the season, and it is especially difficult to fix pharmaceutical limits, as the rotatory power is generally low when the citral value is high.—Perf. & Ess. Oil Rec. 1917, v. 8, p. [illegible]

Henry, Robertson: The oil of lemon produced in Eastern Sicily during 1916-17 is noteworthy for its unusually high optical rotation, the majority of the samples having shown a rotation of 61° to 64°. The citral content, however, is stated to be low as compared with the previous year.—Com. Rep. 1917, No. 77, p. 19.

Scoville, W. L.: Both the natural and concentrated oils of lemon are frequently low in citral content. J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Scoville, Wilbur L.: The citral-containing oils lose their flavoring power to a great extent unless kept perfectly dry and free from exposure to light and air. –Bull. Pharm. 1917, v. 31, p. 123.

Wilson, C. P., and Young, C. O.: A description of a method for the determination of the volatile oil content of citrus fruits.—J. Ind. & Eng. Chem. 1917, v. 9, p. 959–961.

OLEUM MENTHÆ PIPERITÆ.

Fuller, H. C.: The standard for oil of peppermint is altogether too limited in its scope. Oils of excellent flavoring quality distilled directly from the plant often contain much less menthol than the U. S. P. prescribes.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

OLEUM MYRCIÆ, N. F.

Farwell, Oliver Atkins: The proper author citation for *Pimenta acris* is (Swartz) Kostel, not Wight. -Drug Circ. 1917, v. 61, p. 231.

Anon.: The reason why the Islands of St. Thomas and St. Jan have long been noted for producing the best bay oil is probably because of the fact that the "lemoncillo," or false bay oil tree, does not grow there.—Pharm. J. 1917, v. 98, p. 489.

Tempany, H. A.: Data showing the specific gravity and phenol content of bay oil from Montserrat.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 160.

OLEUM PIMENTÆ.

Farwell, Oliver Atkins: *Pimenta Pimenta* (Linné) Lyons is the valid binomial for the source of this product, not *Pimenta officinalis* Lindley, as given in the U. S. P.—Drug. Circ. 1917, v. 61, p. 175.

OLEUM PINI PUMILIONIS.

Anon.: A pine needle oil two and one-half times more concentrated than the oil obtained from Siberian pine needles is produced by Buettner. It contains 73 to 74 per cent of bornyl acetate and boils at 230° C. An abstract. –Drug. Circ. 1917, v. 61, p. 20.

OLEUM ROSÆ.

Anon.: Statistics relative to the production of oil of rose in Bulgaria are given.—Am. Drug. 1917, v. 65, p. 59.

Parry, Ernest J.: Data showing the physical and chemical constants of the French otto of rose are presented.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 6–8.

OLEUM ROSMARINI.

Parry, E. J.: An African sample of oil of rosemary examined had a specific gravity of 0.908 and an optical rotation of 1.0°. It contained 4 per cent of esters and 15 per cent of alcohols. Perf. & Ess. Oil Rec. 1917, v. 8, p. 263.

Pigulevski, G. V.: Tables are given showing the rotation, dispersion coefficient, and specific gravity of oil of rosemary. J. Russ. Phys. Chem. Soc. Proc. 1916, v. 48, p. 1047–1048, through Chem. Abstr. 1917, v. 11, p. 3580.

OLEUM SABINÆ.

Dohme, A. R. L.: Of the samples of oil of savin examined, a number were adulterated with oil of turpentine. Two shipments were found to consist of French oils, instead of true oil of savin. Proc. N. W. D. A. 1917, p. 521.

Roberts, J. G.: One lot of oil of savin which was received before the U. S. P. IX. was in force was rejected, as it had a specific gravity of 0.867 and an optical rotation of +7° 21'. The U. S. P., VIII, required a specific gravity ranging from 0.903 to 0.923 and an optical rotation ranging from +40° to +60°. Proc. Pennsylvania Pharm. Assoc. 1917, p. 88.

OLEUM SANTALI.

Anon.: Notes on the production of sandalwood oil in Mysore. Bull. Imp. Inst. 1917, v. 15, p. 108–111.

Komppa, Gust., and Hintikka, S. V.: A report of researches on the complete synthesis of santene. Bull. soc. chim. France, 1917, v. 21, p. 13–19.

Lea, E. J.: Two so-called samples of sandalwood oil examined were rejected, as they consisted principally of substitute materials. Rep. California Bd. Health, 1917, p. 150.

OLEUM SINAPIS VOLATILE.

Adler, Philip: An explanation of the chemistry of the U. S. P. method of assay for the volatile oil of mustard. Am. J. Pharm. 1917, v. 89, p. 120.

Van Kampen, G. B.: Chemistry of the essential oils of mustard. The influence of thymol on the quantitative estimation of mustard oil is discussed. Olien en Vetten, 1917, v. 2, p. 156–159, through Chem. Weekbl. 1917, v. 14, p. 1157.

OLEUM TEREBINTHINÆ.

Herbert, H.: An account of the production of oil of turpentine in Poland. Z. f. angew. Chem. 1916, v. 29, part 1, p. 361–363, through Chem. Abstr. 1917, v. 11, p. 1295.

Palazzo, M.: Physical and chemical properties of Italian oil of turpentine obtained from *Pinus pinaster.*—Ann. chim. applicata. 1917, v. 7, p. 88; J. Soc. Chem. Ind. 1917, v. 36, p. 463.

Palazzo, F. C.: Data obtained in the determination of the physical and chemical constants of the volatile oil obtained from the oleoresin of *Pinus pinea.*—Chem. Abstr. 1917, v. 11, p. 97.

Halse, O. M., and Dedichen, Herman: A report of a chemical investigation of the turpentine oil obtained in the treatment of wood for cellulose by the sulphite process.—Ber. deutsch. chem. Gesellsch. 1917, v. 50, p. 623–630, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 398.

Tsakalotos, D. E.: Observations on the value of the determination of the optical activity of turpentine oils as a means of identifying the species of pines.—Gazz. chim. ital. 1917, v. 47, part 1, p. 285–287.

Anon.: A comprehensive discussion of the various methods employed in the adulteration of oil of turpentine. Rosin oil and "white spirit," a petroleum distillate with hardly any petroleum odor, are mentioned as common adulterants. —Ann. Falsif. 1917, v. 10, p. 33–47.

Anon.: Notes on the adulteration of oil of turpentine. An abstract.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 350.

Patch, E. L.: A sample of oil of turpentine examined had a specific gravity of 0.8435 and a refractive index of 1.4622 at 20° C. The sample contained a notable quantity of kerosene.—J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

OLEUM THYMI.

Dohme, A. R. L.: One shipment of oil of red thyme examined contained practically no phenols. Proc. N. W. D. A. 1917, p. 521.

OPIUM.

Scidmore, George H.: The cultivation of the opium poppy in Japan has been extended, and the output of opium amounted to about 2,535 pounds.—Com. Rep. 1917, No. 179, p. 418.

Kehl, John E.: It is stated that the quality of eastern Macedonian opium harvested in 1916 is better than usual, the morphine content being 1 per cent higher than in normal years. The quantity produced in Greek and Serbian Macedonia during 1916 is estimated to be about 15,000 pounds. -Com. Rep. 1917, No. 30, p. 469.

Tunmann. O.: A description of a method for the identification of opium by means of meconine and meconic acid.—Apoth.-Ztg. 1916, v. 31, p. 499–500 and 503–504, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 226.

Dohme, A. R. L.: The amount of slaked lime used in the opium assay is too great and should be reduced.—Proc. N. W. D. A. 1917, p. 502–503.

(Anon.) In order to overcome the inconveniences attending the U. S. P. assay of opium, the H. K. Mulford Co. suggests that the alkaloids be extracted by maceration in a wide-mouthed bottle instead of by trituration in a mortar. Working directions for the modified method are given.—Drug. Circ. 1917, v. 61, No. 8, p. 25.

Rakshit, J. N. Attention is called to the fact that ammonia is given off when opium is mixed with slaked lime in the assay process of the Ph. Brit.—Pharm. J. 1917, v. 98, p. 255.

Carles, P. A discussion of the conflicting reports relative to the presence of oxidable morphine in crude opium.—Répert. pharm. 1917, v. 28, p. 1-3; J. pharm. et chim. 1917, v. 15, p. 44-47.

Faltis, Franz. A critical review of the work of Knorr, Freund and Braun on the constitution of morphine.—Arch. Pharm. 1917, v. 255, p. 85-117; through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 441.

Von Braun, J., et al. A report of researches dealing with the constitution of the morphine alkaloids.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2655-2665; ibid. 1917, v. 50, p. 43-44; through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 163 and 281.

Borsche, W. Researches on the constitution of meconic acid.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2538-2546; through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 117.

Freund, Martin, and Speyer, Edmund. A report of researches dealing with the conversion of thebaine into hydroxycodeinone and its derivatives.—J. prakt. Chem. 1916, v. 94, part 2, p. 135-178, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 217.

Webster, John. Analytical notes on the detection of morphine in the organs and body fluids in cases of acute and chronic cases of opium poisoning.—Analyst, 1917, v. 42, p. 226-229.

Macht, David I., and Fisher, Homer G. A study of the toxic action of opium alkaloids, individually and in combination with each other, on paramecia.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 95-104.

M'Kenzie, K. O. The inhibiting action of opium on hyperglycaemia after the ingestion of carbohydrates is an indirect result of the inhibiting effect of opium on the evacuation of the stomach. It may also act directly on the increase of glucose in the blood during fasting, and thus diminish both hyperglycaemia and glucosuria.—Pharm. J. 1917, v. 98, p. 340; Chem. Abstr. 1917, v. 11, p. 628.

Lowsley, H. A. Experiences with papaverin in the treatment of ureteral calculus. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 1662.

OVI ALBUMEN RECENS, N. F.

Rakusin, M. A., and Flier, G. D. Data relative to the specific rotations of aqueous solutions of egg albumen are presented.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 458-461, through J. Soc. Chem. Ind. 1917, v. 36, p. 301.

Jansen, B. C. P.: A description of an accurate method for the determination of arginine in egg albumen.—Chem. Weekbl. 1917, v. 14, p. 124–129.

Rakuzin, J., and Braudo, E. M.: An investigation of the behavior of ferric and aluminum hydroxides toward egg albumen.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 95–97, through J. Soc. Chem. Ind. 1917, v. 36, p. 301.

Verkade, P. E.: A general survey of the progress made in the synthesis of the albumins.—Chem Weekbl. 1917, v. 14, p. 89–104.

OVI VITELLUM RECENS, N. F.

Barbieri, N. A.: From experiments it is concluded that lecithin containing glycerol, phosphoric and stearic acids, is not present in egg yolk.—Gazz. chim. ital. 1917, v. 47, part 1, p. 1–37.

Steenbock, H.: An account of the extraction of an antineuritic substance from egg yolk. The substance is incompletely precipitated by phosphotungstic acid and is stable to concentrated hydrochloric acid and alkalies at room temperature.—Proc. Am. Soc. Biol. Chem., J. Biol. Chem. 1917, v. 29, p. XXVII.

Levene, P. A., and Meyer, G. M.: Some analytical data relative to the composition of cerebrosides of egg yolk are presented.—J. Biol. Chem. 1917, v. 31, p. 649–654.

OVUM GALLINACEUM, N. F.

Postolka, August: An investigation of conditions favorable for and the effects of the growth of molds in eggs.—Chem. Zentralbl. 1916, v. 2, p. 755, through Chem. Abstr. 1917, v. 11, p. 2215.

Rullmann, W.: An investigation of the bacteria and catalase content of eggs.—Chem. Zentralbl. 1916, v. 1, p. 1178, through Chem. Abstr. 1917, v. 11, p. 2509.

Bostock, H. D.: U. S. patent No. 1212445 describes the preservation of eggs by means of a solution consisting of *Desmodium tortuosum meibomia*, 1 pound, and water, 1 gallon.—Chem. Abstr. 1917, v. 11, p. 856.

Subirana I.: Swiss patent No. 74124. Eggs are preserved by impregnating the shell with a liquid containing at least one drying oil and allowing the latter to dry and form a film. —Chem. Abstr. 1917, v. 11, p. 1866.

OXYGENIUM.

Adamson, Tilden: Compressed oxygen used for the production of the oxyacetylene flame for welding purposes is above the U. S. P., IX, standard for purity, and may be used for medicinal purposes. It is 98 per cent pure, whereas the U. S. P. requires "not less than 95 per cent." —J. Am. M. Assoc. 1917, v. 68, p. 1621–1622.

[illegible], F.: A simple method for the preparation of pure oxygen makes use of the reaction which takes place between a solution of hydrogen peroxide and potassium permanganate, alone or in the presence of sulphuric acid.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 190–191.

[illegible]: A review of a volume by Martin (and seven joint authors) on industrial gases. The work includes descriptions of the methods of manufacturing and liquefying hydrogen, oxygen, nitrogen, ammonia, sulphur dioxide, carbon dioxide, etc.—Chem. Weekbl. 1917, v. 14, p. 174.

Haldane, J. S.: A discussion of the methods of administering oxygen and the benefits derived therefrom.—Brit. M. J. 1917, v. 1, p. 181–18[illegible].

Nicloux, M.: A report of experiments showing the importance of oxygen in the treatment of carbon monoxide poisoning.—Presse médicale, 1917, v. 25, p. 153; J. Am. M. Assoc. 1917, v. 68, p. 1511.

PANCREATINUM.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not the milk test for pancreatin be retained in the U. S. P., as it seems unreliable and unnecessary.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Rakusin, M. A., and Pekarskaya, G. F.: A preliminary communication on researches dealing with the optical and other properties of pancreatin.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 1314–1315, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 422.

Long, J. H., and Hull, Mary: A report of further researches to determine the effect of pepsin and acid on trypsin.—J. Am. Chem. Soc. 1917, v. 39, p. 162–174, 1493–1500.

PARACOTO, N. F.

Anon.: Of six samples of paracoto bark examined not one agreed with the description given in the N. F.—Proc. N. W. D. A. 1917, p. 519.

PARAFFINUM.

[illegible]: A review of methods for the determination of melting points, with special reference to the melting point of paraffin.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 2–4.

[illegible], A. F.: U. S. patent No. 1239618. A paraffin powder is prepared by melting paraffin and stirring it with a solution of ammonium stearate in water or other solvent until cool.—Chem. Abstr. 1917, v. 11, p. 3454.

Marcusson, J.: A continuation of previous work relating to the detection and determination of paraffin.—Chem. Zentralbl. 1916, v. [illegible], p. [illegible]; through Chem. Abstr. 1917, v. 11, p. 1290.

Wales, H. E.: A description of a method for the determination of paraffin in asphalt, oils, tarry materials, and paraffin base oils.—Chem. Analyst, 1917, v. 20, p. 12–13.

PARAFFIN FILMS (NONOFFICIAL).

Hull: Formulas for the preparation of paraffin dressings similar to that of ambrine are given.—Brit. M. J. 1917, v. 1, p. 37–38.

Anon.: A review of formulas for the preparation of paraffin films suitable for use in the treatment of burns.—Pharm. J. Lond. 1917, v. 98, p. 65.

Emerson, M. L.: A report of experiences with the wax-paraffin film in the treatment of burns.—J. Am. M. Assoc. 1917, v. 69, p. 274–275.

Kirmission: A description of the treatment of burns by means of ambrine, a mixture of paraffin and resin. An abstract.—Practitioner, 1917, v. 98, p. 91.

Rathery and Bauzil: A formula for the preparation of a paraffin dressing analogous to ambrine is given.—J. des Practiciens, April 28, 1917, through Practitioner, 1917, v. 99, p. 190–191.

Sollmann, Torald: A report of experiments to devise a suitable formula for the preparation of a paraffin mixture similar to ambrine. Ordinary paraffin m. p. 50° C. was found to possess practically the same mechanical properties.—J. Am. M. Assoc. 1917, v. 68, p. 1037–1038.

Leech, P. N.: Notes on the composition of ambrine. A superior formula for its preparation is presented.—J. Am. M. Assoc. 1917, v. 67, p. 1497.

PAREIRA, N. F.

Dohme, A. R. L.: The stems of pareira or an allied plant are often used as a substitute or adulterant of the root which is official. They are readily distinguished by the greenish color of the bark or by adhering lichens, as well as by the larger pores of the wood, the concentric layers of which are generally disposed to separate one from another.—Proc. N. W. D. A. 1917, p. 512.

PASTÆ.

Colledge, L., and Drummond, Hamilton: A report on the treatment of recent gunshot wounds with bismuth-iodoform paste.—Lancet, 1917, v. 193, p. 49–51.

PASTA ZINCI, N. F.

Anon.: In commenting on the N. F. method for preparing zinc paste it is stated that warming the mortar in which the preparation is to be made and melting that portion of the petrolatum which is first mixed with the zinc oxide is advantageous, in that it yields a very smooth mixture free from grittiness.—N. A. R. D. J. 1917, v. 24, p. 405.

PELLETIERINÆ TANNAS.

Tanret, Ch.: Exception is taken to the replacing of the name pelletierine in the four alkaloids of pomegranate bark by the term "punicine." The latter was applied by Righini to a resinous matter extracted by him from the pomegranate tree, while methyl-, iso-, and pseudo-pelletierine are the names which were originally given these alkaloids by Tanret.—J. pharm. et chim. 1917, v. 15, p. 158–159.

Amici: A study of the pharmacological action of pelletierine. In warm-blooded animals pelletierine produces an excitation of the nervous system which is obscured by the simultaneous development of a progressive muscular paralysis. The anthelmintic action of pelletierine is explained by the paralysis which it produces.—J. suisse pharm. Aug. 31, 1916, through Repert. pharm. 1917, v. 28, part 2, p. 89.

PEPSINUM.

Ramsay, C. F.: A series of tests made by the author indicates that pepsin solutions deteriorate and that the deterioration is progressive. That acidity is a feature promoting deterioration is shown by the greater loss in activity of the preparations containing the larger percentage of acid.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1047–1048.

Scoville, Wilbur L.: The N. F., IV, contains 12 different liquid preparations of pepsin, none of which have been very closely studied for therapeutic permanency. We really know but little about the value of official pepsin preparations after they are a few months old.—Am. Druggist, 1917, v. 65, No. 1, p. 26.

Crompton, Leon A.: Of 87 samples of pepsin preparations examined between 1905 and 1917, 29 were passed and 58 were below standard. The percentages would be 33.33 per cent legal and 66.67 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Graber, Howard T.: A report of investigations dealing with the rennetic properties of pepsin.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1173–1176.

PERSIO, N. F.

Farwell, Oliver Atkins: "(*Fam. Parmeliaceae*)" should be inserted after "lichens."—Drug. Circ. 1917, v. 61, p. 231.

Engelhardt, H.: The scarcity of cudbear at the present time has apparently induced some dealers to put a drug on the market which is far inferior in coloring power. The color produced by some of the recent shipments of the drug has a decidedly yellowish-red tint instead of the characteristic dark bluish-red color.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

Roberts, J. G.: A sample of cudbear offered by a broker was considered unfit on account of having a low color value and because of its gummy condition and sour odor.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 84.

PETROLATUM.

Lami, Pio: A paper dealing with vaseline and its use in pharmacy. Boll. chim.-farm. 1917, v. 56, p. 65–69.

Gifford, N.: Ordinary soft paraffin is considered to be preferable to liquid paraffin and more efficacious for the relief of chronic constipation.—J. Am. M. Assoc. 1917, v. 68, p. 304.

PETROLATUM LIQUIDUM.

Anon.: A list of 35 trade names under which liquid paraffin is sold.—Am. Druggist, 1917, v. 85, No. 11, p. 42.

Engelhardt, H.: From an examination of the liquid petrolatums on the market the author concludes that, with the exception of the California heavy liquid petrolatum, no other liquid petrolatum, even that of Russian origin, meets the sulphuric-nitric acid test as proposed for adoption by the U. S. P., IX. —J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Odom, W. F., and Davies, W. W.: From an experimental comparison of American and Russian mineral oils the authors conclude that a liquid paraffin, which has undergone extensive clinical investigation, is free from olefeines or other active substances, and which is of high viscosity, should serve as the best medicinal lubricant for intestinal stasis. —J. Am. Pharm. Assoc. 1917, v. 6, p. 257–259.

Francis, C. K., and Crawford, C. W.: An investigation relative to the detection and determination of sulphur in petroleum.—J. Ind. & Eng. Chem. 1917, v. 9, 479–481.

Anon.: Fluorescense in liquid petrolatum can be made to disappear by the addition of a small amount of nitronaphthaline; 0.2 to 0.3 gm. per 100 cubic centimeters is sufficient for this purpose. Pharm. Ztg. 1916, v. 61, p. 208, through Schweiz. Apoth.-Ztg. 1916, v. 54, p. 218.

Patch, E. L.: The specific gravity of eight samples of liquid petrolatum examined ranged from 0.850 to 0.858 at 25° C. Two of the samples showed fluorescence; six showed a marked darkening when heated with sulphuric acid. —J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Roberts, J. G.: All lots of liquid petrolatum examined complied with the viscosity tests and other requirements of the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

Scoville, W. L.: Much of the liquid petrolatum on the market has a kerosene odor and taste, and darkens when heated with sulphuric acid.—J. Am. Pharm. Assoc. 1917, v. 6, p. 412.

Stern, Heinrich: Notes on the use of liquid petrolatum in the treatment of gastric affections.—Am. Med. 1917, v. 23, p. 561–562.

Burns, Nesbitt: Insufficiently purified liquid paraffin causes a skin eruption of a pseudo-erysipelas type when used for the dressing of wounds.—Chem. & Drug. 1917, v. 89, p. 1039.

Salomon, O. Three cases of poisoning are reported due to the use of liquid petrolatum instead of olive oil for diluting ointments. An abstract.—Pharm. Weekbl. 1917, v. 54, p. 1561.

PETROSELINUM.

Farwell, Oliver Atkins. *Petroselinum hortense* Hoffmann has precedence over *Petroselinum sativum* Hoffmann, but the valid binomial is *Petroselinum Petroselinum* (Linné) Karsten.—Drug. Circ. 1917, v. 61, p. 175.

Engelhardt, H. Eight lots of parsley seed examined yielded from 11 to 29 per cent of oleoresin.—J. Am. Pharm. Assoc. 1917, v. 6, p. 115.

PETROXOLINUM IODI, N. F.

Anon. Any turbidity in this preparation is due to the use of inferior ingredients. The oleic acid and stronger ammonia water must be of U. S. P. standard, otherwise an unsatisfactory product is sure to result.—N. A. R. D. J. 1917, v. 24, p. 1058.

PETROXOLINUM LIQUIDUM, N. F.

Beringer, George M. Liquid petrox of the N. F., IV, is an ammonia soap solution of light mineral oil. It is used as a readily absorbable vehicle for medicines applied externally to produce a desired action on subdermal tissues.—Proc. New Jersey Pharm. Assoc. 1917, p. 92.

Anon. Since Russian liquid petrolatum is no longer obtainable American oils must be used in the manufacture of this preparation, and the best way to obtain a satisfactory product is to use spirit of ammonia instead of stronger ammonia water and alcohol, as directed by the N. F.—N. A. R. D. J. 1917, v. 23, p. 584.

PHENOL.

Scoville, W. L. Phenol of high grade is scarce. Most of that offered is dark in color, has a foreign odor, and a low melting point.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

Aylsworth, J. W., et al. U. S. patent No. 1213142. A method for preparing phenol by heating a mixture of chlorobenzene and alkali hydroxide solution at 300° and under a pressure higher than that of the vapor tension of the mixture is described.—J. Soc. Chem. Ind. 1917, v. 36, p. 382.

Asher, Philip. An explanation of the U. S. P. method for the assay of phenols.—Am. J. Pharm. 1917, v. 89, p. 167–168.

Kirk, J. B. Methods for the determination of phenol and salicylic acid in antiseptic gauzes and cotton are described.—Year-Book of Pharmacy, 1917, p. 257.

Weiss and Downs. A detailed description of a method for the determination of phenol in crude carbolic acid and tar oils.—J. Ind. & Eng. Chem. 1917, v. 9, p. 569.

Congdon, Leon A.: Of 48 samples of carbolic acid examined between 1905 and 1917, 21 were passed, 26 were below standard, and 1 above standard. This would mean 43.75 per cent legal and 56.25 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Sayre et al.: Four of five samples of carbolic acid were below standard or adulterated.—Rep. Kansas Bd. Health, 1916, v. 12, p. 428.

PHENOL LIQUEFACTUM.

McElhenie, T. D.: A description of a safe and easy method for the preparation of liquid phenol. An abstract.—Bull. Pharm. 1917, v. 31, p. 123.

Sayre et al.: Nine of 20 samples of liquefied phenol examined were low in phenol content.—Rep. Kansas Bd. Health, 1917, v. 13, p. 170.

PHENOLPHTHALEINUM.

Dohme, A. R. L.: Some samples of phenolphthalein are very dark in color, low in melting point, and contain impurities which are decidedly objectionable. A good product is not easily obtained.—Proc. N. W. D. A. 1917, p. 511.

Green, C.: One lot of phenolphthalein examined was dark in color and melted at about 210° C. The U. S. P. requires a melting point not below 253° C.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

PHENYLIS SALICYLAS.

Miller, R.: A method for the determination of salol and quinine in tablets is described in detail.—Am. J. Pharm. 1917, v. 89, p. 215.

Nacken, R.: Experiments with salol in determining the velocity of crystallization in undercooled fusions are described.—Centr. Min. Geol. 1917, p. 191–203, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 363.

Roberts, J. G.: One lot of phenyl salicylate examined was rejected on account of its undesirable dark color.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

Todd, A. R.: One sample of salol examined was rejected for being of poor quality.—Bull. Michigan D. & F. Dept. 1917, No. 264–267, p. 24.

PHOSPHORUS.

Terwen, J. W.: A review of the progress made in the chemistry of phosphorus during the last 15 years, with a summary of the literature. Four allotropic forms of phosphorus are mentioned—namely, violet, white isometric, white hexagonal, and black.—Chem. Weekbl. 1917, v. 14, p. 180–197.

Lemkes, H. J.: A report of researches on the determination of phosphorus by the Dusart–Blondlot method and the application of the method to toxicological work.—Farm. Españ. 1917, v. 49, p. 518–520, 535–537, 550–552.

Burge, W. E. A report of the effect of phosphorus poisoning on the catalase content of the tissues.—Am. J. Physiol. 1917, v. 44, p. 545–548.

PHYSOSTIGMA.

Anon. The ether-soluble alkaloidal content of one sample of Calabar bean assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Polonovski, Max. A report of further studies on the alkaloids of Calabar bean.—Bull. soc. chim. France, 1917, v. 21, p. 191–200; 292–303.

PHYSOSTIGMINÆ SALICYLAS.

Nascher, A. L. A study of the physiological action and therapeutic applications of physostigmine.—Am. J. Clin. Med. 1917, v. 24, p. 717–719.

PHYTOLACCA, N. F.

Farwell, Oliver Atkins. The proper valid designation of the source of poke root is *Phytolacca Americana* Linné.—Drug. Circ. 1917, v. 61, p. 231.

PILOCARPINÆ HYDROCHLORIDUM.

Roberts, J. G. A recent importation of pilocarpine hydrochloride examined was of U. S. P. quality except that it had a melting point of 198.5° C. to 199.5° C., which is a little above the U. S. P. standard of 197° C. to 198° C. A sample of pilocarpine hydrochloride put out by a reliable and well-known manufacturer had a melting point ranging from 198.75° C. to 199.5° C. It was considered of good quality, as the melting point method of the U. S. P. IX has a tendency to give results slightly higher than the U. S. P. standard for pilocarpine hydrochloride.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

Ransom, Fred. A study of certain antagonists of pilocarpine.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 169–184.

PILOCARPUS.

Anon. The alkaloidal content of one sample of pilocarpus assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

PILULÆ.

Macke, William J. Notes on the use of manna in the preparation of soft mass pills.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1058–1059.

Gundberg. An account of trituration experiments with various substances to obtain data relative to the distribution of materials in pills and divided powders.—Farm. Rev. 1916, No. 52; through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 88.

Richardson. A discussion of methods for the preparation of pills containing hypophosphites. An abstract.—Giorn. farm. chim. 1917, v. 66, p. 108.

Maske, William, jr.: A presentation of data showing the rate of disintegration of various pill masses.—J. Am. Pharm. Assoc. 1917, v. 6, p. 1059–1062.

Lehmann, F.: Notes on the application of a method for the estimation of arsenic in animal material, previously described by the author, to the determination of arsenic in vegetable material, such as iron arsenic pills.—Arch. Pharm. 1917, v. 255, p. 305–307, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 579.

PILULÆ FERRI CARBONATIS.

Lundin, P. E.: A history of Blaud's pills, with a bibliography and directions for their preparation as given in 17 of the National Pharmacopœias. The qualitative tests and methods for the quantitative determination of the important constituents are discussed in detail.—Svensk farm. Tidskr. 1917, v. 21, p. 49–54, 73–78, 129–134, 189–192, and 205–208; Schweiz. Apoth.-Ztg. 1917, v. 55, p. 653–657.

PILULÆ PHOSPHORI.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not phosphorus pills deteriorate; also whether or not they are desirable.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

PIPER.

Sindall, Harry E.: An account of the determination of water in pepper and cloves by distillation with kerosene.—J. Assoc. Off. Agric. Chem. 1917, v. 2, part 2, p. 197–200.

Paul, E.: A note regarding the determination of crude fiber in black pepper.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 200–201.

Street, John Phillips: The examination of 10 commercial samples of black pepper gave results as follows: Total ash, 4.56 to 7.12 per cent; crude fiber, 9.93 to 15 per cent; and nonvolatile ether extract, 6.51 to 8.31 per cent.—Rep. Conn. Agric. Exper. Sta. 1917, p. 151.

Anon.: A sample of ground pepper examined in England was found to be adulterated with 4.5 per cent of sodium chloride.—Brit. Food J. 1917, v. 19, p. 215.

Anon.: Notices of judgment Nos. 4501 and 4504 relate to the adulteration of pepper.—S. R. A., Chem. 1917, p. 1 and 5.

PLUMBI ACETAS.

Osaka, Yukichi, and Hara, Raijiro: Solubility data relative to lead acetate in water are given. At 25° C., 100 grams of water dissolve 54.38 grams; at 35° C., 87.77 grams; and at 45° C., 154. 25 grams of lead acetate.—Mem. Coll. Sci., Kyoto Imperial Univ. 1917 v. 2, p. 147–150, through Chem. Abstr. 1918, v. 12, p. 444.

Zotier, V.: Hydrogen peroxide may be used to differentiate between a normal and a basic lead salt. With the latter, lead peroxide is formed, but with the former this reaction does not take place.—Bull. soc. chim. France, 1917, v. 21, p. 244–246.

PLUMBI OXIDUM.

Larsen, Esper S.: Notes on massicot and litharge, the two modifications of lead monoxide. The mineral massicot consists of two modifications of PbO—a yellow one which is orthorhombic, and a red one which is tetragonal.—Am. Mineral. 1917, v. 2, p. 18–19, through Chem. Abstr. 1917, v. 11, p. 567.

PLUMBI OXIDUM RUBRUM, N. F.

Zotier, V.: A note on the preparation of red lead by the wet method.—Bull. soc. chim. France, 1917, v. 21, p. 246.

Torossian, G.: Dilute nitric acid (1:5) containing 0.5 per cent of tartaric acid is stated to be an excellent solvent for red lead.—J. Ind. & Eng. Chem. 1916, v. 8, p. 1076.

PODOPHYLLUM.

Anon.: Experiments conducted in the H. K. Mulford laboratories indicate that the U. S. P. VIII method for assaying mandrake gives better results, and is therefore superior to the method given in the U. S. P., IX. Analytical data to this effect are presented.—Drug. Circ. 1917, v. 61, No. 10, p. 29.

Anon.: The resin content of one sample of mandrake assayed was above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

POTASSII ACETAS.

Van der Haar, A. W.: An English sample of potassium acetate examined contained chloride and sulphate.—Pharm. Weekbl. 1917, v. 54, p. 256.

POTASSII BITARTRAS.

Anon.: A sample of cream of tartar examined in England was found to contain 50 parts per million of lead.—Brit. Food J. 1917, v. 19, p. 54.

POTASSII BROMIDUM.

Anon.: A sample labeled "Potassium Bromide" was found to consist of sodium bromide, and contained a large excess of moisture (12 per cent).—J. Am. Pharm. Assoc. 1917, v. 6, p. 413, from Drug Topics.

Schabelitz, H.: An experimental study of bromism, including observations made by the author upon himself.—Chem. Abstr. 1917, v. 11, p. [illegible]

POTASSII CARBONAS.

Umida, T.: Japanese patent No. 29535 describes a method of purifying crude potassium carbonate by heating with CuO and then treating according to the usual method.—Chem. Abstr. 1917, v. 11, p. 527.

Dohme, A. R. L.: One lot of potassium carbonate examined contained 20.6 per cent excess of water, and was 2.1 per cent low in strength after drying.– Proc. N. W. D. A. 1917, p. 515.

POTASSII CHLORAS.

Betts, A. G.: An electrolytic method for the oxidation of potassium chloride to potassium chlorate is described.—Met. & Chem. Eng. 1916, v. 15, p. 627.

Anon.: In 1914 the production of potassium chlorate amounted to 300 tons; in 1917 the production had increased to 3,500 tons per year.—J. four. élec. 1917, v. 26, p. 181, through Chem. Abstr. 1917, v. 11, p. 2561.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of potassium chlorate.—Am. J. Pharm. 1917, v. 89, p. 170.

Dohme, A. R. L.: One shipment of potassium chlorate examined contained nitrites and nitrates.—Proc. N. W. D. A. 1917, p. 507.

Roberts, J. G.: One lot of potassium chlorate examined was rejected on account of a decided yellow color, and another lot on account of its dirty condition.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 89.

Waterman, H. I.: A communication concerning the spontaneous infection of a saturated solution of potassium chlorate with a species of penicillium.—Chem. Weekbl. 1917, v. 14, p. 514–515.

POTASSIUM CHLORIDUM, N. F.

Kurnakov, N. S., et al.: Analytical notes on the deposits of potassium chloride in the salt beds of Solikamsk.—Bull. acad. sci. Petrograd, 1917, p. 467–474, through Chem. Abstr. 1917, v. 11, p. 2653.

Hultman, G. H.: Swedish patent No. 42584. Potassium chloride is prepared by heating alum shale mixed with another chloride.—Chem. Abstr. 1917, v. 11, p. 2721.

Clack, Basil W.: Values for the diffusion coefficient of potassium chloride, potassium nitrate, and sodium chloride are given.—Proc. Phys. Soc. Lond. 1917, v. 29, p. 49–57.

Smith, G. McPhail, and Ball, T. R.: A study of the ionization relations of sodium and potassium chlorides in sulphate mixtures.—J. Am. Chem. Soc. 1917, v. 39, p. 179–218.

POTASSII DICHROMAS.

Bruhns, G.: A study of the use of potassium dichromate as a standard in volumetric analysis.—J. prakt. Chem. 1917, v. 95, part 2, p. 37–52, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 266.

Ask, Anna: Histological descriptions of changes in the kidneys in poisoning by potassium dichromate, mercuric chloride, and cantharides.—Arch. Int. Med. 1917, v. 19, p. 125–137.

Hinsdale, Albert E., and Hadley, R. V.: Descriptions of the histological changes produced in the lungs and livers of guinea pigs and rabbits by various homeopathic remedies, including a saturated aqueous solution of potassium dichromate.—J. Am. Inst. Homeop. 1917, v. 9, p. 897–900.

POTASSII FERROCYANIDUM.

Dohme, A. R. L.: One lot of potassium ferrocyanide examined was of unsatisfactory quality and showed that it was alkaline in reaction, contained sulphate and chloride, and an excess of water. It also had an indicated strength of 102.61 per cent when tested according to the permanganate method.—Proc. N. W. D. A. 1917, p. 515.

Roberts, J. G.: Recent shipments of potassium ferrocyanide have been too alkaline and have contained excessive amounts of sulphate and water. They were greenish-yellow instead of a lemon yellow color, and had an indicated strength as high as 107.8 per cent when tested according to the permanganate method.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

POTASSII IODIDUM.

Flaney, James: A report of an incompatibility in a prescription containing potassium iodide and quinine sulphate. The precipitate which forms is due to the reaction between the potassium and quinine salts.—Proc. Wisconsin Pharm. Assoc. 1917, p. 113.

POTASSII NITRAS.

Hutchinson, C. M.: A review of the industry of preparing potassium nitrate from the soil in India.—Nature, 1917, v. 99, p. 447–448.

Sayre et al.: Three of nine samples of potassium nitrate examined were adulterated.—Rep. Kansas Bd. Health, 1916, v. 12, p. 428–429.

POTASSII PERMANGANAS.

Anon.: "Pure Crystals" is the synonym adopted for potassium permanganate by the Metropolitan Chemists' Association of Melbourne.—Chem. & Drug. 1917, v. 89, p. 980.

Foster, William: A study of the reduction of potassium permanganate by metals.—Chem. News, 1917, v. 115, p. 73.

Roberts, J. G.: Only 9 of 17 samples of potassium permanganate examined complied with the U. S. P. strength requirement of not less than 99 per cent. The strength of the others ranged from 91.26 per cent to 98.84 per cent. Two of the lots were contaminated with coal.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

Anon.: Three cases of poisoning by potassium permanganate occurring in two years are reported by Racine. An abstract.—Drug. Circ. 1917, v. 61, p. 244.

Gurd, Fraser B.: Notes on the use of potassium permanganate in the treatment of anerobic infection of wounds. —J. Roy. Army Med. Corps, 1917, v. 29, p. 202–205.

POTASSII SULPHAS, N. F.

Turkus, B.: An account of experiments dealing with the determination of potassium and sodium in sulphates by the use of chloroplatinic acid.—Ann. chim. analyt. 1917, v. 22, p. 101–102.

van Klooster, H. S.: The solubility curve of potassium sulphate-magnesium sulphate at 25° C. is redetermined.—J. Phys. Chem. 1917, v. 21, p. 513–518.

PRUNUS VIRGINIANA.

La Wall, Charles H.: The presence of particles of metallic iron in a sample of powdered wild cherry bark is reported. The contamination was probably due to the use of a mill with iron grinding surfaces.—Am. J. Pharm. 1917, v. 89, p. 356–357.

Nichols, C. Verne: A presentation of experimental data showing the effect of the sun's rays upon the formation of amygdalin in wild cherry bark.—J. Am. Pharm. Assoc. 1917, v. 6, p. 540–542.

PULVERES.

Dalton, William: Canadian patent No. 175480 describes the manufacture of blended powder compounds. —Chem. Abstr. 1917, v. 11, p. 2949.

Grönberg: An account of trituration experiments to determine the distribution of active materials in divided powders and pills.—Farm. Rev. 1916, No. 52, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 88.

Miller, Reginald: Methods for the determination of aspirin and sodium salicylate in powders are described in detail. —Am. J. Pharm. 1917, v. 89, p. 347–348.

PULVIS ACETANILIDI COMPOSITUS, N. F.

Hommell, P. E.: This preparation does not contain sufficient antidotal properties to prevent death in diseased or susceptible individuals. Headache remedies in most cases should be given in fluid form, with enough heart stimulant to prevent death.—Proc. New Jersey Pharm. Assoc. 1917, p. 84.

PULVIS CRETÆ COMPOSITUS.

Hommell, P. E.: The present compound chalk powder should be removed from the U. S. P., as the presence of sugar in the formula positively defeats the object for which it is intended.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

PULVIS GLYCYRRHIZÆ COMPOSITUS.

Rippetoe, J. R. The U. S. P. should give an ash standard for compound licorice powder.—Drug. Circ. 1917, v. 61, p. 302; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

Editorial. Owing to the shortage of sugar in England it is suggested that the same be replaced in compound licorice powder, Ph. Brit., by the addition of more of the powdered licorice.—Chem. & Drug. 1917, v. 89, No. 1961, p. 43.

PULVIS IPECACUANHÆ ET OPII.

Asher, Philip. A method for the assay of Dover's powder should be included in the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

PULVIS TALCI COMPOSITUS, N. F.

Anon. The reddening of salicylic acid dusting powder is stated to be due to the iron content of the talc. To prevent this, dry the powders thoroughly before mixing.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 420.

PYROGALLOL.

Mito, M. Methods for the preparation of tannic acid, gallic acid, and pyrogallol are described in detail.—J. Chem. Ind. Tokyo. 1917, v. 20, p. 720–737.

PYROXYLINUM.

Van der Marck, J. L. B. Instead of the quantities recommended in the Ph. Nedl. the author recommends using a mixture containing 16 per cent of nitric acid, 65 per cent of sulphuric acid, and 19 per cent of water for the nitration of the cotton in the preparation of pyroxylin.—Pharm. Weekbl. 1917, v. 54, p. 53–57.

QUASSIA.

McIndoo, N. E., and Sievers, A. F. A report of experiments to determine the value of the quassia extract as a contact insecticide.—J. Agric. Res. 1917, v. 10, p. 497–531.

QUININA.

Anon. The output of quinine at the Government cinchona plantations in the Nilgiris Hills, India, during the year 1915–16, amounted to 23,108 ounces.—Chem. & Drug. 1917, v. 89, p. 825.

Dohme, A. R. L. The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not the Kerner test for quinine and its salts is desirable, as it allows 8 to 10 per cent of foreign cinchona alkaloids.—Proc. Am. Drug Mfg. Assoc. 1917, p. 185.

Christensen, A. A report of investigations to determine the nature of the green substance, thalleoquinine, which is formed when a solution of a quinine salt is treated successively with chlorine and ammonia.—Ber. deutsch. pharm. Gesellsch. 1916, v. 26, p. 249–261, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 51.

Van Orsdale, A. A.: From 12.02 to 14.6 per cent of water was found in quinine alkaloid examined during the past year.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

Emery, W. O.: A description of a method for the estimation of caffeine, acetanilid, quinine, and morphine in mixtures containing these substances.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 73–74.

Rogers, Sir Leonard: An experimental investigation of the suitability of the more soluble salts of quinine and cinchona for intravenous injection.—Brit. M. J. 1917, v. 2, p. 381–384.

Herans, J., and St. Girons, F.: A report of a case of anaphylaxis to quinine. The tendency to anaphylaxis was overcome by giving an antianaphylactic dose of 0.005 gram of quinine and 0.5 gram of sodium bicarbonate.—Paris médicale, 1917, v. 7, p. 161, through J. Am. M. Assoc. 1917, v. 69, p. 1204.

Boerner, Fred: A description of a skin reaction to quinine.—J. Am. M. Assoc. 1917, v. 68, p. 907–908.

Weens: Several cases of quinine amblyopia are reported. An abstract.—Drug. Circ. 1917, v. 61, p. 76.

QUININÆ BISULPHAS.

Howard, Bernard F., and Chick, Oliver: Quinine bisulphate is decomposed by heat into quinicine and quinotoxin. Its use in hypodermic preparations sterilized by heat is dangerous, owing to the extremely toxic action of the latter.—Chem. & Drug. 1917, v. 89, p. 612.

QUININÆ SULPHAS.

Flarity, James: A report of the incompatibility in a prescription containing potassium iodide and quinine sulphate. A precipitate forms due to the reaction between the potassium and quinine salts.—Proc. Wisconsin Pharm. Assoc. 1917, p. 113.

Sayre et al.: Two samples of quinine sulphate tested contained a slight excess of foreign alkaloids.—Rep. Kansas Bd. Health, 1916, v. 12, p. 429.

RENNINUM, N. F.

Scoville, W. L.: Rennin has almost disappeared from the market, and samples now offered for sale are usually low in strength.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

White, E. C.: The milk-coagulating power of seven lots of rennin examined ranged from 1 in 20,450 to 1 in 114,000 on a 7½-minute basis.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

RESINA.

Schwalbe, C. G.: Experiments in the extraction of resin from fir and pine wood by means of ether and alcohol. The extracts contained a considerable portion of unctuous fat.—Ztschr. Forst- u. Jagdwesen, 1916, p. 92-105; through J. Soc. Chem. Ind. 1917, v. 36, p. [illegible].

Sieber, R.: The so-called resin extracted from pine wood with organic solvents contains on the average, 50 per cent of fatty matter.—J. Soc. Chem. Ind. 1916, v. 35, p. 1151.

Sacher, J. F.: A detailed description of a method for the detection of sandarac in resins, varnishes, and intermediate products.—Farben-Ztg. 1916, v. 22, p. 188-189; through Chem. Abstr. 1917, v. 11, p. 1316.

Hauser, E.: A description of a method for the determination of resin in rosin size.—Papier-Ztg. v. 41, p. 1503-1504; through J. Soc. Chem. Ind. 1917, v. 36, p. 603.

RESINA JALAPÆ.

Dohme, A. R. L.: Variable results are obtained in the assay of jalap as an appreciable amount of the chloroform-soluble material is retained by the filter, the amount retained depending on the size of the filter. It is recommended that the filter be washed with chloroform until all soluble matter is removed. The same criticism applies to the determination of the solubility of the resin in ether.—Proc. N. W. D. A. 1917, p. 503.

Rippetoe, J. R.: The U. S. P. directions for determining chloroform and ether-soluble matter in jalap are lacking in details. The operator is left in doubt as to the method of washing, size of filter to be used, or precautions to be observed.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

RESINA PODOPHYLLI.

Scoville, Wilbur L.: Under resin of podophyllum, U. S. P., the resin of *Podophyllum emodi* is distinctly outlawed. The latter species is now recognized by the British Pharmacopoeia, and recent work upon it indicates that it is superior to the species recognized by the United States Pharmacopoeia.—Am. Druggist, 1917, v. 65, No. 1, p. [illegible].

[illegible], H.: Data obtained in the evaluation of podophyllin by the methods of Kremel, Jenkins, Gordin and Merrell, Umney and of the Ph. N. d. are presented.—Arch. Pharm. 1916, v. 254, p. 44-49; through Chem. Abstr. 1917, v. 11, p. 1153.

van der Haar, A. W.: In a report on the analyses of chemicals in Holland during the past few years it is stated that samples of podophyllin yielding 8 per cent of ash were found.—Pharm. Weekbl. 1917, v. 54, p. [illegible].

Patch, E. L.: The alcohol-soluble constituents of three samples of podophyllin ranged between 99 and 99.8 per cent; the ash content between 0.4 and 1.2 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

RESINA SCAMMONIÆ.

Dohme, A. R. L.: A number of samples of scammony resin examined proved to be resin from Mexican scammony. This condition is evidently due to the fact that importation of Levant scammony has practically ceased.—Proc. N. W. D. A. 1917, p. 521.

RESORCINOL.

Wolff, J.: A description of a biochemical reaction for differentiating pyrocatechol, hydroquinone, and resorcinol. The method is based on the different color reactions which take place when a maceration of *Russula delica* (or other fungus rich in laccase) is added to these diphenols.—J. pharm. et chim. 1917, v. 15, p. 94; Ann. chim. analyt. 1917, v. 22, p. 105; Pharm. J. 1917, v. 98, p. 139.

Votocek, Emil: A note on the estimation of phloroglucinol and resorcinol by means of furfuraldehyde.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 2546–2547, through J. Chem. Soc. Lond. 1917; v. 112, part 2, p. 156.

RHEUM.

Anon.: Historical notes on the cultivation of rhubarb in Great Britain.—J. Roy. Soc. Arts, 1917, v. 65, p. 596–598.

Beal, George D., and Okey, Ruth: A description of a method for the qualitative identification of the drugs containing emodin—J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

Hubbard, W. S.: Descriptions of methods for the identification of emodin-bearing drugs.—J. Ind. & Eng. Chem. 1917, v. 9, p. 518–521.

Linde, O.: A mixture of 3 parts of concentrated sulphuric acid and 1 part of alcohol is recommended as a reagent for the detection of curcuma in powdered rhubarb.—Apoth.-Ztg. 1916, v. 31, p. 614, through Ztschr. angew. Chem. 1917, v. 30, part 1, p. 121.

Tunmann, O.: A study of the constituents of the tumor-like growths frequently found imbedded in normal tissue in the rhizomes of Chinese rhubarb.—Physiol. Abstr. 1917, v. 2, p. 538.

van Itallie, L., and Lemkes, H. J.: Data showing the oxalic acid content of rhubarb leaves and stems.—Pharm. Weekbl. 1917, v. 54, p. 1234–1238.

Kirkby, William: Data showing the amount of oxalic and malic acid present in the leaves of different species of rhubarb.—Pharm. J. 1917, v. 98, p. 497.

RUMEX.

Emmanuel, Emm. J. A report of pharmaco-chemical researches on the root of *Rumex pulcher* L.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 589-592, 601-604, 618-621.

SACCHARUM.

Roy, Otto. An account of the history, occurrence, formation in nature, and manufacture of sugar.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 173-176, 193-196, and 218-221.

Freeman, Joseph F. A short account of the manufacture of sugar.—Am. Food J. 1917, v. 12, p. 255-259.

Fowler, William A. An illustrated description of the beet-sugar industry of northern France.—Pharm. J. 1917, v. 98, p. 467-468.

Editorial. Thirty-nine preparations in the U. S. P. and 179 in the N. F. contain sugar in varying amounts.—Am. Druggist 1917, v. 65, No. 12, p. 21.

Hudson, C. S., and Yanovsky, E. Data relative to the rotatory power of some α and β forms of sugars obtained indirectly by means of solubility experiments are presented and discussed.—J. Am. Chem. Soc. 1917, v. 39, p. 1013-1038.

Saillard, Em. An investigation of the action of acids on the rotatory power of sucrose and invert sugar in the presence of soluble salts.—Compt. rend. Acad. sc. 1917, v. 165, p. 116-118.

Plaisance, G. P. A note on the use of thiobarbituric acid as a qualitative test for the ketohexoses.—J. Biol. Chem. 1917, v. 29, p. 207-208.

Walker, Hayden S. A description of a simplified inversion process for the determination of sucrose by double polarization.—J. Ind. & Eng. Chem. 1917, v. 9, p. 490-492.

Schoorl, N., and Regenbogen, A. Observations on the volumetric determination of sugar, including a description of a method developed by the authors.—Chem. Weekbl. 1917, v. 14, p. 221-229.

[illegible], M., and Kolthoff, I. M. Notes on the quantitative determination of sugar by various methods.—Pharm. Weekbl. 1917, v. 54, p. [illegible].

Kolthoff, I. M. A review of the literature of carbohydrate analyses, with a scheme for analyzing a mixture containing sucrose, fructose, glucose, lactose, dextrins, gums, starch, and cellulose.—Pharm. Weekbl. 1917, v. 54, p. 205-214.

Browne, C. A. Referee report of a study of certain modifications of the Clerget method for the determination of sugar.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 134-142.

Blake, A. F. The quantitative determination of minute quantities of sugar by means of α-naphthol.—Int. Sugar J. 1917, v. 19, p. 26, through J. Soc. Chem. Ind. 1917, v. 36, p. 152.

Heiduschka, A.: A report of an investigation of the action of formaldehyde on lactose, maltose, and sucrose.—Arch. Pharm. 1916, v. 254, p. 456–487, through J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 446.

Reed, I. W.: A study of the viscosity of sugar solutions.—Sugar, 1917, v. 19, p. 258–259, through Chem. Abstr. 1917, v. 11, p. 3458.

Pellet, H.: An investigation of the value of thymol, toluene, sodium fluoride, and sodium salicylate as preservatives for solutions of sucrose and invert sugar. -Bull. assoc. chim. sucr. dist. 1917, v. 35, p. 136–138, through Chem. Abstr. 1917, v. 11, p. 3123.

Koheya, S.: A report on the action of sugar in the treatment of wounds. —Chem. Abstr. 1917, v. 11, p. 2370. See also Domenico Liotta, Arch. farm. sper. 1917, v. 23, p. 236–244.

SACCHARUM LACTIS.

Miller, Reginald: A description of a rapid method for the approximate determination of milk sugar in headache powders,—Am. J. Pharm. 1917, v. 89, p. 154–155.

SANGUINARIA.

Scoville, Wilbur L.: Further research on the properties of the constituents of sanguinaria is necessary before the stability of its preparations can be assured. —Am. Druggist, 1917, v. 65, No. 1, p. 26.

Karrer, P.: A report of researches dealing with the constitution of chelerythrine.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 349.

Anon.: Of 10 samples of sanguinaria assayed, the alkaloidal content of 9 was above standard and 1 below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

SANTALUM ALBUM, N. F.

Anon.: Some notes on the origin, distribution, and commerce of sandalwood.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 214–215, 253–254.

SANTONINUM.

Nelson, E. K.: A method for the quantitative determination of santonin in Levant wormseed is described. The method is a modification of the Katz-Fromme procedure. Analytical data obtained with the use of this method are presented.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 79–82.

SAPO.

Slack, H. F.: A concise account of the manufacture and properties of pharmacopœial and other soaps. —Perf. & Ess. Oil Rec. 1917, v. 8, p. 77–81.

Lecoq, Raoul: Laboratory experiments in the preparation of potassium and sodium soaps for the purpose of determining what oils can be advantageously used.—Bull. Sc. pharmacol. 1917, v. 24, p. 13–29.

Lecoq, Raoul: Remarks concerning soaps which are intended primarily for use in surgery.—Bull. Sc. pharmacol. 1917, v. 24, p. 159–163.

Engelhardt, H.: A description of German substitutes for soap, with directions for making the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 59.

Hinckley, J. F.: An explanation of the meaning of the term "fatty anhydrides" as employed in the reporting of soap analyses.—Am. Perf. 1917, v. 12, p. 59.

Anon.: Specifications and methods for testing soaps are given.—Circ. U. S. Bur. Standards, 1916, No. 62, p. 1–25.

Stark, F.: Descriptions of well-known methods for analyzing raw materials and finished products used in soap making are given.—Rev. gen. chim. 1917, v. 20, p. 9–14.

Marcusson, J., and von Huber, H.: Notes on the detection of marine animal oils in fats and soaps. An abstract.—J. Soc. Chem. Ind. 1916, v. 35, p. 1121.

Epperson, J. B.: The U. S. P. method of separating the fatty acids for determining their iodine number is a very tedious process. Acidifying the aqueous solution, extracting with ether, washing the ether solution with water and evaporating at a low heat is much more expedient and practical. The acids may be dried in a vacuum desiccator or over sulphuric acid and weighed before determining the iodine number.—Drug. Circ. 1917, v. 61, p. 592; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

Deane, C.: A method for the determination of fatty acids in war soaps is described.—Seifenfabrikant, 1916, v. 36, p. 730; through Chem. Abstr. 1917, v. 11, p. 1326.

Chamard, J. A.: A new process for the estimation of unsaponifiable matter in soap is described.—Chem. Analyst, 1917, v. 21, p. 13.

Lomakin, V. A.: From experiments it is concluded that neither the alcohol method nor the barium chloride method give accurate results in the determination of the free alkali hydroxide in soaps. A more satisfactory method is described by the author.—J. Russ. Phys. Chem. Soc. 1916, v. 48, p. 411–417; through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 153.

Bosma, A. A.: A description of a distillation method for the determination of moisture in soap and cheese.—Schweiz. Apoth. Ztg. 1917, v. 55, p. 69–71.

Raczynski, A.: A 20 per cent solution of white castile soap in warm water is recommended for use as a dressing for wounds.—Compt. rend. acad. sc. 1917, v. 164, p. 199.

SAPO MOLLIS.

Beringer, George M.: The change made in the U. S. P. formula for soft soap, cottonseed oil being directed in place of linseed oil, has been actuated by economic, rather than scientific, reasons. The new formula is defective and the product is deficient in detergent properties.—Am. J. Pharm. 1917, v. 89, p. 352.

Roller, Emil: The U. S. P. should direct that 90 grams instead of 86 grams of potassium hydroxide be used in the preparation of soft soap, because the KOH content of the alkali is usually less than 85 per cent. It is also stated that the alkali should be dissolved in 400 mils of water, instead of 100 mils as directed.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 30.

Robinson Bros. and Swithenbank: British patent No. 104,409 describes the making of soft soaps from sulphonated sardine, or other fish oil, and sodium hydroxide.—Chem. Abstr. 1917, v. 11, p. 1915.

Rippetoe, J. R.: It is desirable that the U. S. P. direct that the fatty acids and their iodine number be determined for soft soap.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

Wondrath, R.: A war formula for the preparation of potash soap makes use of oleic acid instead of an oil.—Apoth. Ztg., through Pharm. Post, 1917, v. 50, p. 197.

Dohme, A. R. L.: One sample of soft soap was not entirely of U. S. P. quality, as it contained 1.65 per cent excess of water, only 0.03 per cent free alkali, and was not sufficiently soluble in 20 parts of hot water.—Proc. N. W. D. A. 1917, p. 515.

Roberts, J. G.: Two lots of soft soap, made according to the U. S. P., IX, method, were rejected because they contained an excess of water and no free alkali. One of the lots gave a turbid solution with water, indicating the presence of uncombined fat. The other shipment consisted of four barrels, the contents of which differed in consistency and color.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 90.

SARSAPARILLA.

Dohme, A. R. L.: One lot of very inferior drug, which had a decidedly dead appearance, and was almost black in color, was offered as Mexican sarsaparilla.—Proc. N. W. D. A. 1917, p. 520.

SASSAFRAS.

Farwell, Oliver Atkins: *Sassafras Sassafras* (Linné) Karsten is the proper combination for the official sassafras.—Drug. Circ. 1917, v. 61, p. 175.

SCAMMONIÆ RADIX.

Dohme, A. R. L.: Mexican scammony root, *Ipomaea Orizabensis* (pell.) Ledan., has been used as a substitute for both the Levant scammony, *Convolvulus Scammonia*, Lin. and the jalap, *Exogonium Purga* (Wendr.) Benth. It is usually cut in cross sections and is rough from the protruding wood fiber arranged in concentric circles. It has the appearance of poke root.—Proc. N. W. D. A. 1917, p. 512.

Anon.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not Mexican scammony (*Ipomoea Orizabensis*) is not as efficient and desirable as the oriental drug, true scammony being increasingly scarce.—Am. Drug. Mfg. Assoc. 1917, p. 185.

Dohme, A. R. L.: One lot of scammony (Mexican) contained 13.26 per cent resin.—Proc. N. W. D. A. 1917, p. 515.

SCILLA.

Cohen, H. C., jr., and Engelhardt, H.: A discussion of experiments conducted for the purpose of determining if the U. S. P. IX biological standard for squill is correct.—J. Am. Pharm. Assoc. 1917, v. 6, p. 950.

SCOPARIUS, N. F.

Farwell, Oliver Atkins: The specific name in *Cytisus Scoparius* (Linné) Link should be decapitalized. It is not a generic or a vernacular name, just an adjective.—Drug. Circ. 1917, v. 61, p. 175.

SCOPOLA.

Roberts, J. G.: One lot of scopola root examined contained 9 per cent of moisture and 0.43 per cent of alkaloids. The lot was not fully dried and did not comply with the requirements of the U. S. P. VIII, as guaranteed when purchased.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 91.

Anon.: The alkaloidal content of one sample of scopola assayed was below standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

SCOPOLAMINÆ HYDROBROMIDUM.

Straub: The addition of a polyatomic alcohol is recommended as a means of rendering solutions of scopolamine stable. Mannitol is the alcohol recommended for use.—Boll. chim. farm. 1917, v. 56, p. 170.

Ritsema, H.: A note on injurious effects produced by the use of old solutions of scopolamine hydrobromide. Alkali-free glass containers do not prevent deterioration.—Ned. Tijdschr. Geneeskunde, 1917, p. 1466, through Pharm. Weekbl. 1917, v. 54, p. 456.

Schmidt, E.: A report of researches to determine the constitution of scopoline.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 401.

Greenwood, W. G.: A report of the results of scopolamine-morphine treatment during labor in 150 consecutive cases.—Brit. M. J., 1917, v. 2, p. 808-809.

SCUTELLARIA, N. F.

Dohme, A. R. L.: Of nine samples of scutellaria examined only two proved to be of the official variety. Scutellaria canescens and

Scutellaria galericulata were the species most commonly offered for the true drug. One lot of skullcap examined contained at least 15 per cent of foreign leaves and fruits.—Proc. N. W. D. A. 1917, p. 515 and 520.

SENNA.

Memminger, Lucien: An account of the senna industry of Tinnevelly.—Com. Rep. 1917, No. 213, p. 975.

Southard, Addison E.: A consular report on the exportation of senna leaves from Aden to the United States for the second quarter of the year 1917.—Com. Rep. 1917, No. 198, p. 728–729.

Dohme, A. R. L.: The U. S. P. permits the use of the leaflets of *Cassia acutifolia* Delile (Alexandria senna), and of *Casia angustifolia*, Vahl. (Tinnevelly or Indian senna). As the Tinnevelly or Indian senna is a cultivated product, the leaflets gathered from the wild plant (Arabian or Mecca senna) are not admissible under the U. S. P. definition. They are gathered in large quantities, however, and are used as an adulterant of, or substitute for, Alexandria senna. —Proc. N. W. D. A. 1917, p. 512.

Alsberg, C. L.: Examination of samples of importations of "senna" leaves by the Bureau of Chemistry has shown that the material sometimes contains considerable amounts of *Tephrosea apollinea*. The latter contains a toxic glucoside, tephrosin.—S. R. A.-Chem. 1917, No. 19, p. 52.

Engelhardt, H.: A brief note concerning German substitutes for senna leaves. J. Am. Pharm. Assoc. 1917, v. 6, p. 59.

Kraemer, Henry: Comments on the use of coriaria as an adulterant of senna and marjoram. Illustrations showing the distinguishing histological characters are given.—Pacific Pharm. 1917, v. 11, p. 13–15.

Joenssen, A.: A note calls attention to the fact that broken leaflets of "Arabian" senna (*Cassia angustifolia* Vahl.) and "dog" senna (*Cassia obovata* Collad.) have recently been used to adulterate "Alexandrian" senna. Data showing the amounts of free and combined hydroxymethyl-anthraquinones in Alexandrian senna are given.—Chem. & Drug. 1917, v. 89, p. 47.

Dohme, A. R. L.: Several samples of Alexandrian senna (siftings) were found to be adulterated with both Indian senna and sand.—Proc. N. W. D. A. 1917, p. 520.

Casparis: Comments on the Bornträger test of the Ph. Helv. for senna leaves. The author points out that *Cassia auriculata* L., a substitute appearing in Austria and Switzerland, also gives the Bornträger color test.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 97–99.

Beal, George D., and Okey, Ruth: A description of a method for the qualitative identification of the drugs containing emodin.—J. Am. Chem. Soc. 1917, v. 39, p. 716–725.

Sayre et al. A sample of senna leaves examined was found to be worm-eaten.—Rep. Kansas Bd. Health, 1916, v. 12, p. 450.

SERUM ANTIDIPHTHERICUM.

Crawford, Albert C., and Andrus, Carlton L. A report of some experiments on the chemical reactions of diphtheria antitoxin.—Am. J. Pharm. 1917, v. 89, p. 158–165.

Stewart, F. E. An account of the preparation of diphtheria antitoxin.—Pharm. Era, 1917, v. 50, p. 9–10.

Hitchens, A. P., and Tingley, E. K. A description of an intrapalpebral horse test for the selection of horses for the production of diphtheria antitoxin.—J. Immunol. 1917, v. 2, p. 395–397; J. Am. M. Assoc. 1917, v. 68, p. 1660.

Stewart, F. E. A discussion of the importance of diphtheria antitoxin and of the dosage of the same.—Pharm. Era, 1917, v. 50, p. 119–120.

SERUM ANTIDIPHTHERICUM PURIFICATUM.

Stewart, F. E. A description of the Gibson process for the preparation of purified diphtheria antitoxin.—Pharm. Era, 1917, v. 50, p. 10–11.

SERUM ANTITETANICUM.

Stewart, F. E. A short historical account of the discovery of tetanus antitoxin, together with remarks on the precautions which should be observed in its administration.—Pharm. Era, 1917, v. 50, p. 120.

MacConkey, A. T., and Homer, Annie. Experiments are described showing the passive immunity conferred by a prophylactic dose of antitetanic serum.—Lancet, 1917, v. 1, p. 259–261.

Bruce, D. A report of experiments to determine whether administration of tetanus antitoxin by the intramuscular or intrathecal route gives the best results.—Lancet, 1917, v. 1, p. 680–682; see also F. Golla, Ibid. p. 686.

SEVUM PRAEPARATUM.

Issoglio, Giovanni. Data showing the oxidizability number of samples of fresh and rancid mutton tallow are presented.—Giorn. farm. chim. 1917, v. 66, p. 249.

SINAPIS ALBA.

Alsberg, C. L. Standards for mustard seed are given and an assay method for the determination of the volatile oil is described.—S. R. A.-Chem. 1917, No. 20, p. 58–59.

Rusby, H. H. Supplies of genuine mustard of good quality have been so scanty that the import of thousands of tons of related seeds from India and China has been stimulated. The variety has been bewildering, and it has been found utterly impossible to identify the different individuals. Some have a certain amount of pungency while others have none.—J. Am. Pharm. Assoc. 1917, v. 6, p. 411.

Frazer, Robert, jr.: An account of the Japanese trade in mustard seed, giving statistics showing the amount produced and exported for the years 1915 and 1916.—Com. Rep. 1917, No. 197, p. 712–713.

Anon.: Notice of judgment No. 4798 relates to the adulteration of mustard seed.—S. R. A., Chem. 1917, p. 371.

SODII ACETAS.

van der Haar, A. W.: Samples of sodium acetate examined contained traces of chlorides and heavy metals.—Pharm. Weekbl. 1917, v. 54, p. 256.

SODII ARSENAS.

Schreinemakers, I. F. A. H., and de Baat, W. C.: Researches on the composition of the sodium arsenates. A study of the system H_2O–As_2O_3–Na_2O at 25° C.—Chem. Weekbl. 1917, v. 14, p. 262–267.

Asher, Philip: An explanation of the chemistry of the U. S. P. method for the assay of sodium arsenate.—Am. J. Pharm. 1917, v. 89, p. 168.

Lovett, A. L., and Robinson, R. H.: A report of experiments to determine the toxic value and killing efficiency of the arsenates for caterpillars.—J. Agric. Res. 1917, v. 10, p. 199–207.

SODII BENZOAS.

Smith, Carl E.: It is recommended that the Pharmacopœia should prescribe a direct method for the determination of benzoic acid in sodium benzoate in order to limit the amount of water contained in the salt and to eliminate the possibility of the adulteration of the same with sodium salts of cheaper organic acids. These points are not covered by the present pharmacopœial tests for the salt.—Am. J. Pharm. 1917, v. 89, p. 576–577.

Roberts, J. G.: One lot of sodium benzoate examined was adulterated with boric acid. Six of 11 other lots examined were low in strength and gave results ranging from 97.34 per cent to 98.95 per cent.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 91.

SODII BICARBONAS.

Kolthoff, I. M.: A discussion of methods for the determination of carbonate in bicarbonate. It is stated that titration with phenolphthalein as directed in the Ph. Nedl. is sensitive to only 2 per cent.—Pharm. Weekbl. 1917, v. 54, p. 1046–1051.

Canals, E.: A report of an investigation dealing with the action of sodium bicarbonate on certain salts used in pharmacy. The experiments supplement those of Astruc and Cambe.—J. pharm. et chim. 1917, v. 15, p. 145–149.

Hegedi. Some observations on incompatible mixtures with special reference to sodium bicarbonate in irrational prescriptions.—Boll. chim.-farm. 1917, v. 56, p. 280.

SODII BORAS.

Anon. A note on the sources of borax in the United States.—Oil, Paint & Drug Rep. 1917, v. 91, No. 11, p. 57.

SODII CACODYLAS.

Dohme, A. R. L. One shipment of sodium cacodylate examined gave a strong odor of cacodyl and was rejected.—Proc. N. W. D. A. 1917, p. 507.

McCaffrey, J. C. One lot of sodium cacodylate examined contained a slight trace of trivalent arsenic.—Proc. Pennsylvania Pharm. Assn. 1917, p. 90.

SODII CARBONAS MONOHYDRATUS.

Seyler, Clarence, and Lloyd, Percy V. A study of the hydrolysis of sodium carbonate and bicarbonate, and the ionization constants of carbonic acid.—J. Chem. Soc. Lond. 1917, v. 111, p. 138–158.

SODII CHLORIDUM.

Damman, L. W. German patent No. 291265. Rock salt is converted into table salt by grinding to fine particles and moistening with an aqueous solution of another hygroscopic salt.—Chem. Abstr. 1917, v. 11, p. 876. See also p. 1271.

International Salt Co. Holland patent No. 1601. Granulated sodium chloride is prepared by stirring the cooled solution and allowing it to flow over a series of superimposed fans.—Chem. Abstr. 1917, v. 11, p. 2029.

Leep, E. T. A study of the formation of salt crystals from hot saturated solutions.—Am. J. Sci. 1917, v. 43, p. 289–292.

Sill, H. F. Data relative to the influence of pressure on the solubility of sodium chloride are presented.—J. Am. Chem. Soc. 1916, v. 38, p. 2632–2643.

Meredith, Mark. Salt as a wood preservative. Railroad sleepers impregnated with sodium chloride were in good condition after 15 years, whereas sleepers impregnated with zinc chloride had to be renewed after 11 years.—Machinery 1917, v. 23, p. 680 through Chem. Abstr. 1917, v. 11, p. 1030.

SODII CITRAS.

Salant, William, and Wise, Lewis E. Researches on the action of sodium citrate and its decomposition in the body.—J. Biol. Chem. 1917, v. 28, p. 27–58.

SODII CYANIDUM.

Abegg, F.: U. S. patent No. 1232471. Hollow granules of sodium cyanide are made by spraying the molten cyanide against a metal plate exposed to the air. This form of cyanide is said to facilitate its solution in water.—Chem. Abstr. 1917, v. 11, p. 2395.

SODII GLYCEROPHOSPHAS.

Hegland, J. M. A.: A description of a method for the preparation of sodium glycerophosphate. The method consists in evaporating to dryness a mixture of $Na_4P_2O_7$ and H_3PO_4, adding glycerin, and heating at about 190° C.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 109–110.

SODII HYDROXIDUM.

Kipper, H. B.: U. S. patent No. 1227453. Solutions of sodium hydroxide are purified by electrolysing while heating at a temperature of 80 to 175° C., using a nickel anode and a steel cathode.—Chem. Abstr. 1917, v. 11, p. 2171.

Skossareswky, M., and Tchitchinadzé, N.: Data relative to the solubility of caustic soda in liquid ammonia are presented.—J. chim. phys. 1916, v. 14, p. 153–175.

SODII NITRAS.

Allen, A. W.: An account of the Chilean nitrate industry.—Eng. Mining, 1917, v. 103, p. 250–253, through Chem. Abstr. 1917, v. 11, p. 1020.

Monnier, A.: A report on the detection and determination of perchlorates in Chilean saltpeter by means of methylene blue.—Ann. chim. analyt. 1917, v. 22, p. 1.

SODII NITRIS.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine whether or not sodium nitrite tablets are liable to deteriorate.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 185.

Sinigar, H.: A report of a fatal case of poisoning in an infant due to the ingestion of sodium nitrite.—Lancet, 1917, v. 193, p. 162.

SODII PERBORAS.

Rossi, Luis: A comprehensive article dealing with the preparation, properties, and analysis of perborates, with special reference to sodium perborate.—Rev. Farm. 1917, v. 60, p. 83–98.

Anon: British patent No. 100153. A method for the preparation of sodium perborate, by electrolysing a solution of sodium percarbonate and an alkaline borate, is described. —J. Soc. Chem. Ind. 1917, v. 36, p. 83.

Asher, Philip: An explanation of the chemistry of the U. S. P., IX, method for the assay of sodium perborate.—Am. J. Pharm. 1917, v. 89, p. 170–171.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the extent and rate of deterioration of perborates.—Proc. Am. Drug. Mfg. Assoc. 1917, p. 185.

SODII PHOSPHAS.

Smith, John H.: A paper dealing with the constitution of the alkali phosphates and some new double phosphates.—J. Soc. Chem. Ind. 1917, v. 36, p. 420–424.

Balareff, D.: Studies on the dehydration of sodium phosphate. Dehydration can be effected by heating to 250° C. ± 2°.—Ztschr. anorg. Chem. 1916, v. 97, p. 147–148, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 88.

SODII PHOSPHAS EFFERVESCENS.

Rippetoe, J. R.: The U. S. P. should specify a test for sugar and assay methods for the quantitative determination of the sodium phosphate and sodium carbonate in this preparation. This comment also applies to other official effervescent salts.—Drug. Circ. 1917, v. 61, p. 302; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

SODII SALICYLAS.

Emery, W. O.: A description of a method for the estimation of acetanilid and sodium salicylate in mixtures.—J. Assoc. Off. Agric. Chem. 1916, v. 2, p. 70–71.

Milne, Reginald: A description of a method for the quantitative determination of sodium salicylate when admixed with acetylsalicylic acid.—Am. J. Pharm. 1917, v. 89, p. 347–348.

[illegible], V. L.: A discussion of the dosage of sodium salicylate. The proper dose is stated to be 2.5 to 5 grams in 24 hours. An abstract.—J. Am. M. Assoc. 1917, v. 68, p. 587.

Lemay, R.: A note on the phenomenon of intolerance caused by the presence of salicylic acid in sodium salicylate. Sodium salicylate containing as little as 0.06 gram of salicylic acid per kilogram was not tolerated by infants or adults.—Bull. sci. pharmacol. 1917, v. 9, p. 287.

Fantus, Bernard, et al.: Researches to determine the effect of salicylates on experimental arthritis in rabbits.—Arch. Int. Med. 1917, v. 19, p. 529–537.

Gordon, W.: A report on the use of sodium salicylate in the treatment of trench foot.—Brit. M. J. 1917, v. 1, p. 121.

Duncan, William: Notes on compounding a ferric chloride and sodium salicylate mixture.—Pharm. J. Lond. 1917, v. 98, p. 236 and 239.

Casey, F. W.: One sample of compressed tablets of sodium salicylate examined was rejected.—Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16.

SODII SULPHAS.

Turkus, B.: An account of experiments dealing with the determination of potassium and sodium in sulphates by means of chloroplatinic acid.—Ann. chim. analyt. 1917, v. 22, p. 101–102.

SPARTEINÆ SULPHAS.

Tunmann, O.: The best reagents for the microchemical detection of sparteine are solutions of chromic acid (1–2 per cent); zinc chloride (1 per cent), cupric chloride (1 per cent), mercuric chloride, hydriodic acid, and potassio-cadmic bromide. The precipitates formed with these reagents assume characteristic crystalline forms.—Apoth.-Ztg. 1917, v. 32, p. 100–103, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 518–519.

Valeur, Armand: The solubility of sparteine decreases as the temperature rises. The values of the temperature at which turbidity occurs for various dilutions of sparteine in the presence of 5 per cent aqueous sodium carbonate are given, and a method for the estimation of sparteine based on these data is described.—Compt. rend. Acad. sc. 1917, v. 164, p. 818–820.

SPIGELIA.

Rusby, H. H.: This drug, which a few years ago was very scarce, except in a highly adulterated form, is now quite abundant and of reliable quality, although adulterants and substitutes have still to be carefully looked for.—J. Am. Pharm. Assoc. 1917, v. 6, p. 413.

SPIRITUS.

Asher, Philip: The U. S. P. should prescribe methods for determining the volatile oil content of the various spirits. -Am. J. Pharm. 1917, v. 89, p. 175.

Hommell, P. E.: The alcohol in the U. S. P. and N. F. spirits should be replaced by deodorized alcohol or Cologne spirit, as this would tend to improve the odor and taste.—Proc. New Jersey Pharm. Assoc. 1917, p. 84.

SPIRITUS ÆTHERIS COMPOSITUS, N. F.

Barnard, H. E.: One sample of compound spirit of ether examined was rejected for being of poor quality.—Bull. Indiana Bd. Health, 1917, v. 20, p. 196.

SPIRITUS ÆTHERIS NITROSI.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate and extent of deterioration of spirit of nitrous ether.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Broeksmit, T. C. N.: For the preservation of spirit of ethyl nitrite it is recommended that neutralization be effected with magnesium carbonate and that the product be kept in a cool place. The shelf supply should be filtered off as needed and preserved by the addition of sodium sulphite. Free N_2O_3 can be detected by means of pyramidon.—Pharm. Weekbl. 1917, v. 54, p. 1051–1054.

Roller, Emil: The stability of spirit of nitrous ether is much greater if absolute alcohol is used in its preparation, instead of 95 per cent alcohol as directed in the U. S. P.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 30.

Rippetoe, J. R.: The U. S. P. should direct that the spirit of nitrous ether be preserved in cork-stoppered bottles, as ethyl nitrite escapes very rapidly from a glass-stoppered bottle.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

Asher, Philip: An explanation of the U. S. P. IX method for the assay of spirit of nitrous ether.—Am. J. Pharm. 1917, v. 89, p. 172.

Hulbert, Roberts: The nitrous ether content of seven samples of spirit of nitrous ether examined varied from 0.03 per cent to 3.3 per cent. The U. S. P. requires 3.5 per cent to 4.5 per cent.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 346.

Kebler, L. F., and others: Of 79 samples of spirit of nitrous ether examined, 45, or 57 per cent failed to come within 20 per cent of the standard; 51, or 64.5 per cent, deviated from the standard in excess of 25 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 685.

[illegible]

[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

SPIRITUS AMMONIÆ AROMATICUS.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to have an assay process for aromatic spirit of ammonia. The rate of deterioration of aromatic spirit of ammonia should also be determined.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Roller, Emil: The ammonium salt contained in the aromatic spirit of ammonia is the carbonate, which results from the action of the ammonium hydroxide upon the commercial carbonate (a mixture of the carbonate and bicarbonate). -D.-A. Apoth.-Ztg. 1917, v. 38, p. 30.

Anon.: Data are given showing the specific gravity and alkalinity of 78 samples of aromatic spirits of ammonia, also the alcoholic content.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 255.

Sayre et al.: The alkalinity of four samples of aromatic spirit of ammonia tested varied from 1.22 to 1.82; the specific gravity, from 0.8903 to 0.8959; the oil content per liter, from 8.08 cubic centimeters to 10.4 cubic centimeters.—Rep. Kansas Bd. Health, 1916, v. 12, p. 429.

Kebler, L. F., and others: Of 52 samples of aromatic spirit of ammonia examined, 18, or 35 per cent, came within a 10 per cent variation of the U. S. P. standard in ammonia content; 21, or 40 per cent, came within 15 per cent; and 28, or 54 per cent, came within a variation of 20 per cent. The minimum carbonate content varied even more.—J. Am. Pharm. Assoc. 1917, v. 6, p. 615–617.

Casey, F. W.: One sample of aromatic spirit of ammonia examined was rejected for being below standard.—Bull. Michigan D. & F., Dept. 1917, No. 260–261, p. 33.

SPIRITUS AMYGDALÆ AMARÆ.

Hortvet, Julius: Of six samples of almond extract examined, three were rejected because they did not meet the U. S. P. requirements.—Rep. Minnesota D. & F. Com. 1917, p. 53.

SPIRITUS ANISI.

Paul, A. E.: Referee report on the examination of flavoring extracts. Data showing the volatile oil content of spirit of anise when determined by the brine method are presented.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 210.

Anon.: Two lots of spirit of anise examined were 29 and 30 per cent, respectively, below the official standard.—Rep. Massachusetts Bd. Health, through J. Am. Pharm. Assoc. 1917, v. 6, p. 414.

Anon.: Three of eight samples of spirit of anise examined were adulterated or below standard.—Bull. Vermont Bd. Health, 1917, v. 17, No. 4; v. 8, Nos. 1 and 2.

SPIRITUS CAMPHORÆ.

Fuller, H. C.: The assay of spirit of camphor is limited to natural camphor. A perfectly good spirit can be prepared with artificial camphor, but the U. S. P. assay would be of no value in determining its strength.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

Kollo, Constantin: A description of a procedure for the quantitative determination of camphor in the spirit of camphor. The method consists in the precipitation of the camphor from its solution with lead acetate, solution of the precipitate in a weighed amount of ether, and calculation of the quantity of camphor from the increase in weight of the ethereal solution.—Bull. de Chim. Bukarest. 1916, v. 18, p. 44-48, through Chem. Abstr. 1917, v. 11, p. 1516-1517.

Krause, Ludwig: The results obtained in the examination of a large number of samples of spirit of camphor obtained from druggists are presented in tabulated form. Attention is directed to a difference in behavior of the natural and synthetic camphor toward Huebl's solution.—Südd. Apoth.-Ztg. 1916, v. 56, p. 248-249, through Chem. Abstr. 1917, v. 11, p. 864.

Koehler, L. F., and others: Of 44 samples of spirit of camphor examined, 19, or 43 per cent, came within a 10 per cent variation from the official standard; 23, or 52 per cent, came within a 15 per cent variation; 27, or 61 per cent, came within a 20 per cent variation.—J. Am. Pharm. Assoc. 1917, v. 6, p. 684-685.

Congdon, Leon A.: Of 517 samples of spirit of camphor examined between 1905 and 1917, 179 were legal, 224 were below standard, and 114 were above standard. On a percentage basis this means 34.62 per cent were legal, 43.33 per cent were below standard, and 22.05 per cent were above standard.—Proc. Kansas Pharm. Assoc. 1917, p. 86.

[illegible]

[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

SPIRITUS GAULTHERIAE.

Paul, A. E.: Referee report on the examination of flavoring extracts. Data obtained with the saponification method for wintergreen extract are presented.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 209.

SPIRITUS GLYCERYLIS NITRATIS.

Fuller, H. C.: The U. S. P. assay of spirit of nitroglycerin is open to criticism. The conclusions from the results obtained depend largely upon the personal equation of the analyst, and if the conmercial alcohol used in the preparation of the material contains inert soluble substances in excess of that prescribed by the U. S. P. for pure alcohol, the results will be erroneous.—J. Am. Pharm. Assoc. 1917, v. 6, p. 71.

SPIRITUS LIMONIS, N. F.

Hortvet, Julius: Of 50 samples of lemon extract examined, 17 were rejected for not being up to standard.—Rep. Minnesota D. & F. Com. 1917, p. 53.

SPIRITUS MENTHÆ PIPERITÆ.

Beringer, George M.: The formula for the preparation of the mint spirits has been improved in that more uniformly green colored preparations are obtained through previous washing of the mint leaves with water.—Am. J. Pharm. 1917, v. 89, p. 352.

Paul, A. E.: Referee report on the examination of flavoring extracts. Data obtained in the determination of the volatile oil in spirit of peppermint by the carbon disulphide method are presented.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 211.

Congdon, Leon A.: Of 241 samples of essence of peppermint examined between 1905 and 1917, 56 were legal, 169 were below standard, and 16 were above standard. This means that 23.24 per cent were legal, 70.12 per cent were below standard, and 6.64 per cent were above standard.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Table showing some of the analytical results reported for spirit of peppermint.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Casey, F. W.	3	2	Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16; No. 258–259, p. 18.
Frary, Guy G.	17	2	Rep. South Dakota F. & D. Com. 1917, p. 102.
Hortvet, Julius	43	17	Rep. Minnesota D. & F. Com. 1917, p. 53.
Sayre et al.	9	8	Rep. Kansas Bd. Health, 1916, v. 12, p. 429; 1917, v. 13, p. 171.
Todd, A. R.	5	1	Bull. Michigan D. & F. Dept. 1917, No. 264–267, p. 24.
Woods, Charles D.	10	5	Rep. Maine Agric. Exper. Sta. 1917, p. 31.
Anon	12	4	Bull. Vermont Bd. Health, 1917, v. 18, Nos. 1, 2, & 3.

SPIRITUS MYRCIÆ COMPOSITUS, N. F.

Tice, William G.: Of 108 samples of compound spirit of myrciæ examined, 30 were below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

STRAMONIUM.

Alsberg, C. L.: An examination of imported samples of stramonium leaves has disclosed that *Xanthium strumarium* L. has been substituted in some instances for the official drug.—S. R. A.-Chem. 1917, No. 20, p. 59.

Dohme, A. R. L.: On the Pacific coast, *Datura Meteloides* D. C. is being gathered in large quantities and offered as stramonium. It can be readily detected by its soft and short but white pubescence.—Proc. N. W. D. A. 1917, p. 512.

Brinton, Clement S.: In a report on the determination of ash, the ash content of stramonium is given as 18.24 per cent.—J. Assoc. Off. Agric. Chem. 1917, v. 2, p. 207.

Anon.: Of six samples of stramonium leaves assayed, the alkaloidal content of four was above standard and two below.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Dohme, A. R. L.: Four lots of stramonium examined assayed [illegible] per cent, 0.47 per cent, 0.52 per cent, and 0.40 per cent of alkaloids, respectively.—Proc. N. W. D. A. 1917, p. 511.

Scoville, W. L.: The alkaloidal content of five lots of stramonium leaves examined ranged between 0.27 and 0.57 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 414.

Anon.: Notice of judgment No. 4827 relates to the adulteration of stramonium.—S. R. A.-Chem. 1917, p. 292.

STROPHANTHINUM.

Holste, Arnold: Solutions of g-strophanthin retain their activity unchanged for years, while solutions of k-strophanthin become worthless within a year.—Ztschr. exper. Path. u. Therap. 1917, v. 19, p. 153–161.

STROPHANTHUS.

Rowe, L. W.: A study of the influence of the method of administration upon the degree of toxicity of strophanthus preparations. The subcutaneous and intravenous toxicities of four strophanthus preparations examined were found to be from 45 to 300 times as great as their oral toxicities.—Therap. Gaz. 1917, v. 41, p. 536–540.

Cornwall, Edward E.: An article calling attention to some practical points in the use of strophanthus.—Med. Rec. 1917, v. 92, p. 151–152.

van Lammeren, W. Storm: Researches on the physiological evaluation of digitalis and strophanthus preparations.—Pharm. Weekbl. 1917, v. 54, p. 401–412.

STRYCHNINA.

Hankin, E. H.: Reactions of strychnine and brucine with Fehling's solution are described.—India J. Med. Res. 1916, v. 4, p. 237–245.

Filippi, E.: Observations on the influence of quinine on the chemical and physiological reactions of strychnine. A chemical test for distinguishing between quinine and strychnine is described.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 329.

Ray, Prafulla C.: Descriptions of compounds of strychnine and brucine with mercuric nitrite.—J. Chem. Soc. 1917, v. 111, p. 507–510.

Cutler, Elliott C., and Alton, Benjamin H.: A study of the control of strychnine convulsions by intraspinal injections of magnesium sulphate.—J. Exper. M. 1917, v. 25, p. 83–92.

Hatcher, Robert A., and Eggleston, Cary: Researches to determine the fate of strychnine in the body.—J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 281–319.

Kleiner, I. S., and Meltzer, S. J.: A report on the reduction of the toxicity of strychnine by the administration of large quantities of indifferent fluids.—J. Pharmacol. 1916, v. 9, p. 359.

Shelton, H. P.: A note on the value of apomorphine as an antidote for strychnine poisoning.—Therap. Gaz. 1917, v. 41, p. 456.

STYRAX.

Dohme, A. R. L.: Some of the samples of storax examined were apparently a mixture of balsam Tolu with pine tar. Several samples were adulterated with pine tar.—Proc. N. W. D. A. 1917, p. 521.

Jordan, Stroud: A comparison of the physical and chemical properties of American and oriental storax. The analytical data are presented in the form of a table. –Am. J. Pharm. 1917, v. 89, p. 581–584; J. Ind. & Eng. Chem. 1917, v. 9, p. 770–771.

Henze, M.: A chemical investigation of styrax, with special reference to the identification of abietic and pimaric acids.—Ber. deutsch. chem. Gesellsch. 1916, v. 49, p. 1622, through Zentralb. Biochem. u. Biophys. 1917, v. 19, p. 54.

Holmes, E. M.: Notes on storax and other sources of cinnamic acid.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 70–71.

SUCCUS CITRI, N. F.

Farwell, Oliver Atkins: The words "Linné" and "variety," or "var.," should be inserted between "Medica" and "acida." Bonavia named and described a variety, not a subspecies.—Drug. Circ. 917, v. 61, p. 231.

SULPHONMETHANUM.

Sanchez, Juan A.: Several tests for the identification of sulphonal, trional, and tetronal are described.—Rev. farm. 1917, v. 60, p. 699.

SULPHUR SUBLIMATUM.

Guareschi, I.: A note on the origin of the word "sulphur."—Atti accad. sci. Torino, 1917, v. 52, p. 319–328.

Moles, E.: A discussion of the new values for the atomic weights of sulphur and carbon as given in the international table for 1916.—J. chim. phys. 1917, v. 15, p. 51–59.

Scidmore, George H.: Approximately 95,000 tons of sulphur were produced in Japan during 1916. About 71,000 tons were exported, of which about one-half went to the United States.—Com. Rep. 1917, No. 49, p. 788.

Naumann, Bernhard: From an investigation of a sample of black sulphur from Mexico the author concludes that the black sulphur described by Magnus and Knapp is not a special modification of sulphur, but ordinary yellow sulphur which has been colored black by small quantities of carbon or metallic sulphides.—Ztschr. angew. Chem. 1917, v. 30, part 1, p. 165-168, through J. Chem. Soc. Lond. 1917, v. 112, part. 2, p. 464.

Fonzes-Diacon: A discussion of the adulteration of sublimed sulphur. Data are given showing the proportion of sublimed and precipitated sulphur insoluble in carbon disulphide.—Ann. falsif. 1916, v. 9, p. 355-359.

Vinassa, G.: An investigation of the influence of natural and accidental impurities in sulphur on the determination of fineness by means of the Chancel tube.—Staz. sper. agr. ital. 1916, v. 49, p. 388-393, through Chem. Abstr. 1917, v. 11, p. 1805.

Guitteau, L.: An investigation of the action of sulphur on barium hydroxide in the presence of water. BaS_4 exists in solution, but decomposes, yielding BaS_3 on evaporation.—Compt. rend. Acad. sc. 1916, v. 163, p. 390-391.

Emich, F.: To detect sulphur, heat a small quantity of the material to be examined in a capillary tube with nitric acid and observe the formation of $BaSO_4$ when a solution of $BaCl_2$ is added.—Ztschr. analyt. Chem. 1917, v. 56, p. 1-17, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 218.

Bory and Jacquet: A method is described for preparing a solution of sulphur in sesame oil suitable for injection intravenously.—J. pharm. et. chim. 1917, v. 15, p. 360.

Siegfried, C. F.: A solution of sulphur in carbon disulphide is recommended for use in the treatment of skin diseases where sulphur is indicated.—Proc. Pennsylvania Pharm. Assoc. 1917, v. 40, p. 24.

SUPPOSITORIA.

Kohler, Emil: The substitution of a small amount of lanolin for a portion of the cacao butter in the preparation of suppositories is desirable during the cool seasons of the year.—D. A. Apoth. Ztg. 1917, v. 38, p. 40.

Anon.: Notes on the preparation of suppositories of glycerin.—N. A. R. D. J. 1917, v. 23, p. 15.

SUPRARENALUM SICCUM.

Snyder, J. P.: The blood-pressure method for the physiological assay of the suprarenal gland is very satisfactory. The method of using both femoral veins instead of one does not yield as close checks as when the injection is made into the saphenous vein. –Proc. New York Pharm. Assoc. 1917, p. 228.

White, J. Stanley: A brief discussion of the physiological and chemical methods for the evaluation of the activity of adrenalin solution.—Pharm. J. 1917, v. 98, p. 159–160.

van Leeuwen, W. Storm: Data obtained in the physiological evaluation of adrenalin, nicotine, and lobeline by the blood-pressure method are presented.—Pharm. Weekbl. 1917, v. 54, p. 1329–1334.

Pittenger, Paul S.: Comments on the method of measuring and administering the doses in the biological assay of the suprarenal gland. –J. Am. Pharm. Assoc. 1917, v. 6, p. 870–871.

Hamilton, Herbert C.: The U. S. P. test for suprarenal gland is criticized because of the following features: (1) The complications introduced in the test. (2) The inaccurate manner of measuring the test dose. (3) The incomplete administration of the test dose. (4) The method of making a check assay.—Am. J. Pharm. 1917, v. 89, p. 61–71.

Ogata, Tomosaburo, and Ogata, Akira: An article dealing with Henle's reaction of the cromaffin cells in the adrenales, and the microscopic test for adrenaline.—J. Exper. Med. 1917, v. 25, p. 807–817.

Johannessohn, Fritz: Results obtained with the colorimetric method of Fränkel, Allers, and Bayer in the estimation of adrenalin in commercial preparations, are given.—Biochem. Ztschr. 1916, v. 76, p. 377–391, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 55.

Grasset, Raymond: A report of a case of adrenalin poisoning due to the ingestion of two successive doses of 15 and 20 grams of 1 in 1000 adrenalin solution. An abstract.—Presse Medicale, 1917, v. 25, p. 470.

Githins, Thomas S.: A comparative study of certain actions of adrenalin in the cat and the rabbit.—J. Exper. M. 1917, v. 25, p. 323–332.

Meltzer, S. J.: The intraspinal injection of adrenalin is recommended in the treatment of infantile paralysis. The dose recommended is 0.5 cubic centimeter of the solution, to be repeated every 4 to 6 hours.—Year-Book of Pharmacy, 1917, p. 176.

Ercolani, P.: A discussion of suprarenal treatment in nephritis.—Gazzetta degli Ospedali e delle Cliniche, Milan, 1917, v. 38, p. 353, through J. Am. M. Assoc. 1917, v. 68, p. 1670.

Harris, I.: A note on the use of adrenalin in the treatment of nephritis. From 5 to 10 minims of the 1 : 1000 solution were given by mouth from once to four times daily. –Year-Book of Pharmacy, 1917, p. 176.

Milan, G.: Observations on the use of adrenalin in the treatment of rachitism.—Year-Book of Pharmacy, 1917, p. 176, from Paris méd. 1917, v. 7, p. 374.

SYRUPI.

Cook, E. F.: A discussion of the syrups and elixirs of the U. S. P., IX and the N. F. IV.—Midl. Drug. 1917, v. 51, p. 88–91.

Hommell, P. E.: Syrup of garlic, syrup of althea, syrup of asarum, syrup of ferrous chloride, syrup of krameria, syrup of poppy, and syrup of sanguinaria should be dismissed from the N. F. without further comment.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

Holck, Hans: Equivalents of saccharine solutions and sugar syrups of equal sweetening power are given.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 239.

Repetto, Ernesto: Descriptions of methods for the detection and estimation of saccharin in syrups and other pharmaceutical preparations.—Rev. Farm. 1917, v. 60, p. 407–419.

Jalowetz, E.: Notes on the preparation of an albumin containing syrup by the action of yeast on solutions of sucrose.—Chem. Ztg. 1916, v. 40, p. 893–894.

Konantz, W. A.: A discussion of a proposed formula for the preparation of a compound syrup of pepsin intended to pass the criticisms made on the pepsin preparations of the N. F.—J. Am. Pharm. Assoc. 1917, v. 6, p. 243–253.

Hommell, P. E.: A standard aromatic syrup of chocolate should be introduced into the N. F. Such a syrup is an ideal agent to cover the bitter taste of the alkaloids of cinchona bark and is useful to conceal the acrid and nauseous taste of other substances.—Proc. New Jersey Pharm. Assoc. 1917, p. 80

SYRUPUS.

Roller, Emil: Syrup made by the cold process is superior to that made by the hot process. The latter becomes sour and cloudy much sooner than the former.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 30–31.

Mayet: The presence of invert sugar in simple syrup does not always indicate adulteration. Data are given showing that the cane sugar in syrup is inverted on standing.—Répert. Pharm., through Giorn. farm. chim., 1917, v. 66, p. 286.

SYRUPUS ACIDI HYDRIODICI.

Beringer, George M.: The acid content of syrup of hydriodic acid has been slightly increased in order that the official syrup will not be below the strength claimed for some of the proprietary syrups.—Am. J. Pharm. 1917, v. 89, p. 352.

SYRUPUS AURANTII.

Cook, E. Fullerton: In the formula for the preparation of syrup of orange, the magnesium carbonate has been replaced by purified talc, since the alkaline carbonate was found to injure the delicacy of the orange flavor.—J. Am. Pharm. Assoc. 1917, v. 6, p. 76.

Lascoff, J. Leon: The substitution of purified talc for magnesium carbonate in the preparation of the syrup of orange is not satisfactory, as the time consumed in filtration is lengthened and the finished product is not as clear as when magnesium carbonate is used.—Am. Druggist 1917, v. 65, No. 5, p. 25.

Hommell, P. E.: The oil of orange should replace the tincture of sweet orange peel in the syrup of orange. The peel contains gummy and other matters which are prone to decomposition. Glycerin should be added and the syrup made denser.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS BROMIDORUM, N. F.

Hommell, P. E.: Fear is expressed that the syrup of bromides will not become very popular as a sedative and antispasmodic, as it contains too much flavor, and the sugar present is likely to upset sensitive stomachs.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS CALCII LACTOPHOSPHATIS.

Beringer, George M.: The addition of 50 mils of glycerin to the liter in the preparation of the syrup of calcium lactophosphate, as directed in the U. S. P., IX, adds materially to the stability of the syrup.—Am. J. Pharm. 1917, v. 89, p. 353.

SYRUPUS CIMICIFUGÆ COMPOSITUS, N. F.

Anon.: Comments on the N. F. directions for the preparation of the compound syrup of cimicifuga.—N. A. R. D. J. 1917, v. 23, p. 764.

SYRUPUS CODEINÆ, N. F.

Hommell, P. E.: The syrup of codeine requires some glycerin to preserve it, as it has been found not to keep well. Otherwise it is a desirable preparation as a sedative and anodyne.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS ERIODICTYI AROMATICUS, N. F.

Hommell, P. E.: The aromatic syrup of yerba santa is a most efficient disguiser of bitter drugs and a valuable associate for expectorant mixtures. It is suggested that the quantity of sugar in the formula be lessened, and that glycerin be substituted on account of its greater solvent and preservative action.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS FERRI ET MANGANI IODIDI, N. F.

Hommell, P. E.: The syrup of iron and manganese iodide is one of the best tonics and alteratives in fluid form. The formula can not be improved, and from a therapeutic standpoint it will replace all the trade-marked ferruginous tonics ever offered to the profession and public.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS FERRI IODIDI.

Anon.: Comments on the U. S. P. method for the preparation and preservation of syrup of ferrous iodide.—N. A. R. D. J. 1917, v. 24, p. 116.

Utech, P. Henry: If a small piece of metallic iron be placed in the finished syrup of ferrous iodide, exposure to light will not impair its quality, nor will it be necessary to keep the product stored in amber-colored bottles.—Drug. Circ. 1917, v. 61, p. 397.

Hulbert, Robert: A sample of syrup of iodide of iron examined contained nearly twice the amount of ferric iodide required by the U. S. P.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 345.

SYRUPUS FICORUM COMPOSITUS, N. F.

Anon.: Notes on the preparation of the compound syrup of figs.—N. A. R. D. J. 1917, v. 25, p. 455-456.

SYRUPUS GLYCYRRHIZÆ, N. F.

Hommell, P. E.: The syrup of licorice is a nonalcoholic preparation, which will answer every call as a vehicle for acrid and nauseous drugs. It is also of value to conjoin with expectorant and laxative mixtures.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS HYPOPHOSPHITUM, N. F.

Cook, E. Fullerton: The syrup of hypophosphites may be made advantageously by mixing the hypophosphites with the sugar and percolating this mixture with the glycerin and water menstruum. A clear filtered syrup is thus produced with little trouble or danger of contamination from dust and other foreign substances.—J. Am. Pharm. Assoc. 1917, v. 6, p. 76.

Beringer, George M.: The addition of 50 mils of glycerin to the liter in the preparation of the syrup of hypophosphites, as directed in the U. S. P. IX, adds materially to the stability of the syrup.—Am. J. Pharm. 1917, v. 89, p. 353.

Anon.: A note warns against the heating of syrup of hypophosphites, since the hypophosphite salts are decomposed by heating even at the boiling temperature.—Pharm. Ztg. 1917, p. 523, through Schweiz. Apoth.-Ztg. 1917, v. 55, p. 682.

SYRUPUS HYPOPHOSPHITUM COMPOSITUS, N. F.

Anon.: There is an error in the N. F. formula for compound syrup of hypophosphites in that an excessive amount of water is directed to be used. The quantity specified should be changed from 450 milliliters to 400 milliliters.—Drug. Circ. 1917, v. 61, p. 247.

Anon.: Notes on the preparation of the compound syrup of hypophosphites.—N. A. R. D. J. 1917, v. 25, p. 455.

SYRUPUS IODOTANNICUS, N. F.

Manseau: A formula for the preparation of a stock mixture intended to be used in making syrup of iodotannin is given.—Répert. pharm. 1917, v. 28, p. 260-261.

SYRUPUS IPECACUANHÆ.

Cook, E. Fullerton: The syrup of ipecac now contains about 1 per cent of acetic acid in addition to the hydrochloric acid contained in the fluid extract, due apparently to a lack of harmony in the work of the subcommittees.—J. Am. Pharm. Assoc. 1917, v. 6, p. 76.

Rippetoe, J. R.: Hydrochloric acid is used in the preparation of the fluid extract of ipecac, while acetic acid is used in preparing the syrup from the fluid extract. If the additional acid is necessary, the kind used should be the same in both cases.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 464.

SYRUPUS IPECACUANHÆ ET OPII, N. F.

Hommell, P. E.: The syrup of ipecac and opium is of value in many inflammatory conditions of the bronchial-pulmonary system, especially so when combined with the ammonium salts, terpin hydrate. etc.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS MANNÆ, N. F.

Hommell, P. E.: The laxative properties of the syrup of manna could be increased by the addition of senna. It would then prove a dependable cholagogue favoring the secretion and excretion of bile, thus preventing liver congestion and torpidity.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS MORPHINÆ ET ACACIÆ, N. F.

Hommell, P. E.: Syrup of morphine and acacia should be eliminated from the N. F. It is claimed to be a pectoral syrup. It is, however, simply an anodyne demulcent and has nothing of an expectorant character about it.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS PAPAVERIS, N. F.

Hommell, P. E.: Owing to the variable proportion of opium in poppy capsules, the syrup of poppy is uncertain in its effects, and is capable of doing serious injury to young children. If a narcotic of weak character is required it would certainly be better for the physician to add a definite proportion of opium to a suitable vehicle.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS PINI STROBI COMPOSITUS, N. F.

Anon.: Comments on the formula for the preparation of compound syrup of white pine.—N. A. R. D. J. 1917, v. 23, p. 593.

SYRUPUS PRUNI VIRGINIANÆ.

Beringer, George M. The addition of glycerin to the first portion of the menstruum instead of to the percolate in the preparation of the syrup of wild cherry is thought to be a questionable procedure. The syrup obtained by this method may be deeper in color and richer in tannin, but it is doubtful whether the hydrocyanic acid content is as great as when the syrup is prepared by the U. S. P., VIII, method.—Am. J. Pharm. 1917, v. 89, p. 353.

Cook, E. Fullerton. The U. S. P., VIII, formula for the preparation of syrup of wild cherry was criticized because it did not yield a syrup of sufficiently high color. The syrup made by the U. S. P., IX, process corrects this deficiency, but contains tannin and does not possess so pleasant a flavor.—J. Am. Pharm. Assoc. 1917, v. 6 p. 76.

Utech, P. Henry. The characteristic flavor of the syrup of wild cherry is entirely dissipated in a few months if the syrup be left exposed to the light.—Drug. circ. 1917, v. 61, p. 397.

SYRUPUS QUINIDINÆ, N. F.

Hummell, P. E. Where a bitterless febrifuge is desired there is no better remedy than syrup of quinidine. It is palatable and curative. The addition of 5 per cent of glycerin to the mixture is suggested.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS SENNÆ COMPOSITUS, N. F.

Hummell, P. E. The syrup of senna compound is a most satisfactory formula to replace nostrums—a most agreeable laxative and cathartic to take. The doctors should take notice of this preparation, as it will please the most fastidious.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

SYRUPUS STILLINGIÆ COMPOSITUS, N. F.

Hummell, P. E. The compound syrup of stillingia is far superior to the syrup of sarsaparilla compound as a dependable alterative and tonic, and, when properly conjoined with the iodides and mercurials, no prescriber will be disappointed.—Proc. New Jersey Pharm. Assoc. 1917, p. 79.

TALCUM PURIFICATUM.

Anon.: A short note on the location of the talc deposits of Brazil.—Am. Perf. 1917, v. 11, p. 337.

Anon.: The following test for talcum is recommended for the Swedish pharmacopœia: When 5 grams of talcum are boiled with 25 cubic centimeters of N/1 hydrochloric acid, not less than 22 cubic centimeters of N/1 caustic potash solution should be required to neutralize the excess of acid.—Apoth. Ztg. 1917, p. 108 through Pharm. Weekbl. 1917, v. 54, p. 1172.

TARAXACUM.

Farwell, Oliver Atkins: The proper designation under taraxacum is *Taraxacum Taraxacum* (Linné.) Karsten.—Drug. Circ. 1917, v. 61, p. 175.

Alsberg, C. L.: Samples of a recent importation of dandelion root contained about 40 per cent of roots which were badly discolored on the interior and did not show a porous, pale yellow wood, as required by the U. S. P., IX.—S. R. A.-Chem. 1917, No. 20, p. 58.

TEREBINTHINÆ, N. F.

Schorger, A. W., and Pettigrew, R. L.: A report on the increased yield of turpentine and rosin from double chipping.—Bull. U. S. Dept. Agric. Forest Products Lab. 1917, No. 567, p. 1–9.

Ostlund, J.: A report of experiments to determine the composition and properties of the oleoresin obtained from *Pinus Jeffreyi.*—J. Am. Pharm. Assoc. 1917, v. 6, p. 137.

Anon.: Extract from the report of the Comité d'Action of the Eighteenth district on the methods of adulteration of turpentine and legal means of controlling it. —Ann. falsif. 1913, v. 10, p.33–47.

TEREBINTHINA LARICIS, N. F.

Farwell, Oliver Atkins: The proper designation of the species of larch producing Venice turpentine is *Larix Larix* (Linné) Karsten.—Drug. Circ. 1917, v. 61, p. 231.

Anon.: The genuineness of Venice turpentine may be tested as follows: Dissolve 5 gms. of the sample in 20 cubic centimeters of 95 per cent alcohol; add a few drops of phenolphthalein and sufficient of a 10 per cent solution of potassium hydroxide to render it alkaline. With genuine Venice turpentine a clear solution is obtained, while the spurious yields a turbid solution, from which, on standing, drops of oily resin separate.—Pharm. J. 1917, v. 98, p. 506.

TERRA SILICEA PURIFICATA.

Anon.: Kieselguhr is a much more efficient filtering medium than talc or calcium phosphate.—Meyer Bros. Drug. 1917, v. 38, p. 181.

THYMOL.

Anon.: The leaves of *Ocimum viride* are stated to be a possible new source of thymol. Leaves from the four-months-old plant yielded 0.5 per cent of oil, the oil containing 62 per cent of thymol.—Bull. Imp. Inst. 1917, v. 15, p. 322–325.

Marquina, M.: Data relative to the solubility of thymol in mixtures of water and glycerol are given. At 25° C., 100 parts of water dissolved 0.0752 part of thymol and 100 parts of glycerin dissolved 1.71 parts.—J. Chem. Soc. Lond. 1917, v. 112, part 1, p. 689 from Anal. fis. quim. 1917, v. 15, p. 262–271.

Elion, H.: The author claims that he had previously published the bromine method for the determination of thymol, salicylates, and similar compounds described by Seidell. His publication appears in Rec. trav. chim. 1888, v. 7, p. 211.—J. Am. Chem. Soc. 1917, v. 39, p. 1513.

Reid, E. Emmet: The detection of thymol by means of α-bromo-p-nitrotoluene is described.—J. Am. Chem. Soc. 1917, v. 39, p. 304–309.

Formánek, J., and Knop, J.: In a review of the spectroscopic identification of phenols the identification of thymol by means of the spectrum of its phthalein condensation product is discussed.—Ztschr. analyt. Chem. 1917, v. 56, p. 273–298, through J. Soc. Chem. Ind. 1917, v. 36, p. 922.

Astruc and Cambe: Notes on the incompatibility of thymol with quinine hydrochloride and santonine. Thymol forms a pasty mass with the first and a fluid with the latter.—J. pharm. et chim. 1917, v. 15, p. 383.

Washburn, B. E.: A report on the effectiveness of thymol in the treatment of hookworm.—J. Am. M. Assoc. 1917, v. 68, p. 1162–1164.

THYMOLIS IODIDUM.

Adler, Philip: An explanation of the chemistry of the U. S. P. IX. method for the assay of thymol iodide.—Am. J. Pharm. 1917, v. 89, p. 168.

THYMUS, N. F.

Dohme, A. R. L.: Two samples of thyme examined consisted of Cretan dittany (*Origanum dictamnus*).—Proc. N. W. D. A. 1917, p. 620.

THYROIDEUM SICCUM.

Kendall, E. C.: A report of researches dealing with the active constituent of the thyroid gland, its isolation, chemical properties, and physiologic action.—Endocrinology, 1917, v. 1, p. 153–160, through Physiol. Abstr. 1917, v. 2, p. 350.

Pellegrini, Rinaldo: Thyroid studies. I. Relations between the histological structure of the thyroid gland and its iodine content.

Arch. sci. med. 1916, v. 40, p. 92–123, through Chem. Abstr. 1917, v. 11, p. 475.

van Os, D.: Notes on the determination of iodine in thyroid glands and in mineral waters.—Pharm. Weekbl. 1917, v. 54, p. 350–353.

Rogoff, J. M.: A physiological method for the standardization of thyroid preparations makes use of the specific effect of thyroid feeding on tadpoles.—J. Pharmacol. 1917, v. 10, p. 109–208.

Rogoff, J. M., and Marine, David: An account of attempts to produce a substance with thyroid-like activity by the artificial iodization of proteins. –J. Pharmacol. & Exper. Therap. 1917, v. 10, p. 321–325.

Carver, A. E.: Comments on dosage in the therapeutic administration of thyroid gland substance. Brit. M. J. 1917, v. 2, p. 515.

Basinger, H. R.: An investigation of the alleged detoxicating power of the thyroid gland with respect to bacterial toxins. The positive results reported by Renedi were not confirmed.—J. Infect. Dis. 1917, v. 20, p. 131–139.

Kuriyama, Shigenobu: A study of the influence of thyroid feeding upon carbohydrate metabolism.—Am. J. Physiol. 1917, v. 42, p. 481–496.

TINCTURÆ.

Congdon, Leon A.: Among the tictures found to be deteriorated in drug stores of Kansas were the following: Tincture of digitalis, gelsemium, and gentian compound.—Proc. Kansas Pharm. Assoc. 1917, p. 88.

Hommell, P. E.: It is suggested that the N. F. should contain a 10 per cent tincture of sage, as it is oftentimes called for to combine with resorcin, glycerin, and bay rum for scalp treatment. –Proc. New Jersey Pharm. Assoc. 1917, p. 83.

Hommell, P. E.: The tinctures of asafetida, cardamom, pyrethrum, squill, and stramonium should have been dropped from the U. S. P. or placed in the N. F. to keep steady company with the tincture of nutgall.—Proc. New Jersey Pharm. Assoc. 1917, p. 83.

TINCTURA ACONITI.

Anon.: Forty samples of tincture of aconite assayed 0.013 to 0.051 gm. aconitine to 100 cubic centimeters. Twenty-eight were below the U. S. P. standard of 0.045 gm. –Bull. Connecticut Agric. Exper. Sta., through J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Anon.: Of 97 samples of tincture of aconite examined, 44 were not within 10 per cent of the official strength.—Bull. North Dakota Agric. Exper. Sta., through J. Am. Pharm. Assoc. 1917, v. 6, p. 310.

Congdon, Leon A.: Of 83 samples of tincture of aconite examined between 1905 and 1917, only 5 were legal and 78 were below the standard. The percentages show 6.02 per cent legal and 63.98 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Sayre et al.: Two of 12 samples of tincture of aconite assayed contained more than the required amount of ether-soluble alkaloids.—Rep. Kansas Bd. Health, 1917, v. 13, p. 264.

TINCTURA ARNICÆ.

Congdon, Leon A.: Of 20 samples of tincture of arnica examined between 1905 and 1917, 14 were legal and 6 illegal. Percentages show 70 per cent passed and 30 per cent not passed.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Hulbert, Roberts: Two samples of tincture of arnica examined were low in alcohol content.—Bull. North Dakota Expet. Sta. F. Dept. 1917, v. 4, p. 344.

Sayre et al.: One of three samples of tincture of arnica tested was low in alcohol content.—Rep. Kansas Bd. Health, 1917, v. 13, p. 262.

TINCTURA BENZOINI.

Carey, F. W.: Of 31 samples of tincture of benzoin examined, 13 were rejected for being below standard.—Bull. Michigan D. & F. Dept. 1917, No. 258–259, p. 18; No. 260–261, p. 33.

TINCTURA CACTI GRANDIFLORI, N. F.

Anon.: Comments relative to the procuring of the cactus for the preparation of the tincture of cactus grandiflorus.—N. A. R. D. J. 1917, v. 23, p. 405–406.

TINCTURA CALUMBÆ.

Carey, F. W.: Of three samples of tincture of calumba examined, one was not of U. S. P. quality.—Bull. Michigan D. & F. Dept. 1917, No. 258–259, p. 18.

TINCTURA CANTHARIDIS.

Scoville, W. L.: A discussion of various menstrua for exhausting cantharides in the preparation of the tincture.—J. Am. Pharm. Assoc. 1917, v. 6, p. 798–800.

TINCTURA CARDAMOMI COMPOSITA.

Carey, F. W.: Of three samples of tincture of cardamom compound examined, one was not of U. S. P. quality.—Bull. Michigan D. & F. Dept. 1917, No. 258–259, p. 18.

TINCTURA CINCHONÆ.

[illegible], F.: A method for the assay of tincture of cinchona is described in detail. Tragacanth is used to facilitate filtration of the mixture used for extracting the alkaloids.—Pharm. Weekbl. 1917, v. 54, p. [illegible].

TINCTURA CINCHONÆ COMPOSITA.

Rippetoe, J. R.: The use of red cinchona of high assay diluted to standard in the finished product will produce a preparation of varying strength with reference to the bitter orange peel and serpentaria.—Drug. Circ. 1917, v. 61 p, 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

McElhenie, Thomas D.: The use of 1 per cent hydrochloric acid in the preparation of the compound tincture of cinchona is recommended in order to avoid precipitation of the cinchotannic acid and alkaloids upon standing.—Am. J. Pharm. 1917, v. 89, p. 309–310.

TINCTURA DIGITALIS.

Scoville, Wilbur L.: The tincture of digitalis of the U. S. P., VIII, was pharmaceutically satisfactory but not therapeutically reliable. In order to impart greater stability to the preparation, the alcoholic strength of the menstruum employed was increased.—Am. Druggist 1917, v. 65, No. 1, p. 25.

TINCTURA FERRI CHLORIDI.

Roller, Emil: The tincture of ferric chloride should be classed as a liquor and given the title, "Liquor Ferri Chloridi Alcoholicus."—D.-A. Apoth.-Ztg. 1917, v. 38, p. 31.

Duncan, William: A note on the method for compounding a prescription containing sodium salicylate, sodium bicarbonate, tincture of ferric chloride, and water.—Pharm. J. 1917, v. 98, p. 236.

Table showing some of the analytical results reported for tincture of ferric chloride.

Reporters.	Number of samples— Examined.	Rejected.	Reference.
Eskew, Harry L.	2	1	Rep. Tennessee F. & D. Dept. 1917, p. 15.
Hulbert, Roberts.	96	38	Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 341.
Lea, E. J.	1	1	Rep. California Bd. Health, 1917, p. 162.
Price, J. D.	33	10	Bull. Georgia Dept. Agric. 1917, v. 4, No. 1, p. 11-12.
Sayre, et al.	5	1	Rep. Kansas Bd. Health, 1917, v. 13, p. 168
Tice, William G.	51	16	Rep. New Jersey Dept. Health, 1917, p. 62.

TINCTURA GALLÆ, N. F.

Scoville, Wilbur L.: Apparently the subcommittee which recommended the deletion of tincture of nutgall from the U. S. P. judged the various astringent preparations by their palatability and therapeutic usefulness, but found no information concerning their stability. There is reason for believing, however, that tincture of nutgall is the most stable and therefore the most reliable of the astringent preparations.—Am. Druggist, 1917, v. 65, No. 1, p. 25.

Rusby, H. H.: The ointment of nutgall is official in the U. S. P. and the tincture is official in the N. F. It is not understood why the tincture is not also in the U. S. P.—Proc. Am. Drug Mfg. Assoc. 1917, p. 33; Pract. Drug. 1917, v. 35, No. 3, p. 27.

TINCTURA GAMBIR COMPOSITA.

Anon.: Notes on the preparation of the compound tincture of gambir.—N. A. R. D. J. 1917, v. 24, p. 405.

Congdon, Leon A.: Tincture of catechu gelatinizes on aging if not properly stored.—Proc. Kansas Pharm. Assoc. 1917, p. 88.

TINCTURA GELSEMII.

Carey, F. W.: Of four samples of tincture of gelsemium examined, two were not of U. S. P. quality.—Bull. Michigan D. & F. Dept. 1917, No. 258–259, p. 18.

TINCTURA HYOSCYAMI.

Anon.: Experiments conducted in the H. K. Mulford laboratories to determine the effect of heat upon the results obtained in the alkaloidal assay of hyoscyamus, showed that the assay results are practically not affected by the evaporation of the tincture at the temperature of a water bath.—Drug. Circ. 1917, v. 61, No. 3, p. 25.

TINCTURA IODI.

Rolle, Emil: Tincture of iodine should be classed with the liquors and given the title, "Liquor Iodi Alcoholicus."—D. A. Apoth.-Ztg. 1917, v. 38, p. 31.

Lascoff, J. Leon: The addition of water in the preparation of the tincture of iodine, as directed by the U. S. P., IX, is a great improvement over the method formerly official, as the ingredients are much more easily dissolved.—Am. Druggist 1917, v. 65, No. 5, p. 26.

Terry, Robert W.: The contraction of the ethyl alcohol volume, and temperature changes which take place in the mixing of the ingredients in the preparation of the tincture of iodine are discussed.—Midl. Drug. 1917, v. 51, p. 419.

Stewart, A. H.: French patent No. 478819 describes the preparation of solid tincture of iodine using soap, 200 grams; alcohol, 100 cubic centimeters; tincture of iodine, 400 cubic centimeters.—Chem. Abstr. 1917, v. 11, p. 868.

Rho, F.: A discussion of substitutes for tincture of iodine which were employed during the war on account of the inconveniences experienced in the use of the tincture.—Schweiz. Apoth.-Ztg. 1916, v. 54, p. 500–501.

Dohme, A. R. L.: The method for the determination of potassium iodide in tincture of iodine is not entirely satisfactory, as the boiling of the tincture to drive off the iodine usually causes a loss of material. It is much simpler to convert the iodine into halide by hydrosulphite or sulphite, and to titrate the total amount of halide present.—Proc. N. W. D. A. 1917, p. 504.

Congdon, Leon A.: Of 517 samples of tincture of iodine examined between 1905 and 1917, 161 were legal, 234 were below standard, and 122 above the standard or "too strong." On a percentage basis this would mean 31.14 per cent legal, 45.26 per cent below standard, and 23.60 per cent above standard.—Proc. Kansas Pharm. Assoc. 1917, p. 86.

Kebler, L. F., and others: Of the 65 samples of tincture of iodine examined, 38, or 58 per cent, came within a 10 per cent variation from the iodide standard; 48, or 74 per cent, came within a 15 per cent variation. With respect to the iodine content, 18, or 28 per cent, exceeded a 25 per cent limit.—J. Am. Pharm. Assoc. 1917, v. 6, p. 686–687.

Table showing some of the analytical results reported for tincture of iodine.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Anon	28	5	Bull. Vermont Bd. Health, 1917, v. 18, Nos. 1, 3 & 4.
Bachman, G	19	6	Proc. Minnesota Pharm. Assoc. 1917, p. 186.
Casey, F. W	55	32	Bull. Michigan D. & F. Dept. 1917, No. 256–257, p. 16; No. 258–259, p. 18; No. 260–261, p. 33; No. 262–263, p. 13.
Eskew, Harry L	55	23	Rep. Tennessee F. & D. Dept. 1917, p. 15.
Frary, Guy G	12	5	Rep. South Dakota F. & D. Com. 1917, p. 101.
Jongeward, Matty	35	17	Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 271.
Lea, E. J	34	8	Rep. California Bd. Health, 1917, p. 162.
Pozen, M. A	4	2	Rep. District of Columbia Health Off. 1917, p. 50.
Price, J. D	45	28	Bull. Georgia Dept. Agric. 1917, v. 4, No. 1, p. 13–15.
Sayre et al	8	4	Rep. Kansas Bd. Health, 1917, v. 13, p. 169.
Tice, William G	10	6	Rep. New Jersey Health, 1917, p. 62.
Todd, A. R	24	13	Bull. Michigan D. & F. Dept. 1917, No. 264–267, p. 24.
Woods, Charles D	20	5	Rep. Maine Agric. Exper. Sta. 1917, p. 32.

TINCTURA IODI DECOLORATA, N. F.

Bohrisch, P.: The crystalline precipitate frequently noted in decolorized tincture of iodine probably consists of sodium tetrathionate and free sulphur.—Pharm. Zentralh. 1917, v. 58, p. 611–613.

TINCTURA KINO.

Congdon, Leon A.: Tincture of kino, if not properly stored, gelatinizes on aging.—Proc. Kansas Pharm. Assoc. 1917, p. 88.

Lascoff, J. Leon: The tincture of kino is now a stable preparation owing to the improvement in the U. S. P. method of manufacture.—Am. Druggist, 1917, v. 65, No. 5, p. 26.

TINCTURA LOBELIÆ.

Anon.: A criticism of the U. S. P. method for the preparation of tincture of lobelia states that the drug contains an alkaloid readily decomposed on heating, and a pungent volatile oil which is almost entirely dissipated in the process of drying, and that, therefore, the fresh drug must be used in order to obtain a preparation having the full activity of lobelia.—N. A. R. D. J. 1917, v. 25, p. 185-186.

TINCTURA MYRRHÆ.

Casey, F. W. Of 15 samples of tincture of myrrh examined, 10 did not meet the U. S. P. requirements.—Bull. Michigan D. & F. Dept. 1917, No. 258-259, p. 18; No. 262-263, p. 13.

TINCTURA NUCIS VOMICÆ.

Lascoff, J. Leon. Very few pharmacists will be able to prepare the tincture of nux vomica according to the directions given in the new U. S. P., as an alkaloidal assay is required. The latter, however, is justified, as the tincture has in the past been of unknown strength and of variable activity.—Am. Druggist, 1917, v. 65, No. 5, p. 26.

Sayre et al. Three samples of tincture of nux vomica assayed were of U. S. P. quality.—Rep. Kansas Bd. Health, 1917, v. 13, p. 263.

Congdon, Leon A. Of 41 samples of tincture of nux vomica examined between 1905 and 1917, 16 were passed, 21 were below standard, and 4 were above standard, making percentages of 39.02 per cent legal and 63.98 per cent illegal.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

TINCTURA OPII CAMPHORATA.

Kebler, L. F., and others: Of 99 samples of paregoric examined, 72 or 73 per cent, came within a 20 per cent variation from the U. S. P. standard, and 23, or 23 per cent, exceeded a 25 per cent variation.—J. Am. Pharm. Assoc. 1917, v. 6, p. 618-621.

Towns, Charles B. The drug habit may be established just as easily by taking paregoric daily as by taking morphine straight by the mouth in small quantities, yet, at the present time, druggists have a perfect legal right to sell this preparation without a prescription in any quantity they may see fit.—Pharm. Era, 1917, v. 51, p. 11.

TINCTURA QUASSIÆ.

Casey, F. W. Three of four samples of tincture of quassia examined were not of U. S. P. quality.—Bull. Michigan D. & F. Dept. 1917, No. 258-259, p. 18; No. 260-261, p. 33.

TINCTURA RHEI.

Congdon, Leon A. A yellow precipitate forms in tincture of rhubarb on aging. King found this to be chrysophanic acid.—Proc. Kansas Pharm. Assoc. 1917, p. 88.

TINCTURA STRAMONII.

Fleagle, M. M.: A discussion of the physiological action of the tincture prepared from powdered stramonium seeds. -Hahnemann. Month. 1917, v. 52, p. 106–110.

TINCTURA VANILLÆ, N. F.

Schlotterbeck, J. O.: An account of researches on vanilla extract.—Am. Perf. 1917, v. 11, p. 322–323, 356–357.

Shaffner, Samuel E.: Some reasons why vanilla beans should be chopped instead of ground for the preparation of the tincture of vanilla.—Simmon's Spice Mill, 1917, v. 40, p. 1074–1076.

McGill, A.: Of 125 samples of commercial extract of vanilla examined in Canada, 54 were artificial, 12 were adulterated, and 3 were doubtful.—Bull. Lab. Inl. Rev. Dept. Canada, 1917, No. 369, p. 4; Pract. Drug. 1917, v. 35, No. 12, p. 40.

TINCTURA ZINGIBERIS.

Snyder, J. P.: It is suggested that the following standards replace those now given in the U. S. P. for tincture of ginger: Solids, from 1.25 to 1.75 per cent; alcohol, about 90 per cent. The water-soluble test may be dropped, as the information obtained from the same is of no practical value if the alcohol content is in the neighborhood of 90 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 713–714.

Congdon, Leon A.: Of 99 samples of tincture of ginger examined between 1905 and 1917, 63 were classed as passed, 31 as below standard, and 5 above standard. Percentages show 63.63 per cent passed, 31.31 per cent below standard, and 5.06 per cent above standard.—Proc. Kansas Pharm. Assoc. 1917, p. 87.

Casey, F. W.: Two samples of tincture of ginger examined were not of U. S. P. quality.—Bull. Michigan D. & F. Dept. 1917, No. 260–261, p. 33.

Sayre et al.: Five of eight samples of tincture of ginger tested were low in total solids or alcoholic content.—Rep. Kansas Bd. Health, 1917, v. 13, p. 171.

Todd, A. R.: Of three samples of tincture of ginger examined, two did not meet the U. S. P. requirements.—Bull. Michigan D. & F. Dept. 1917, No. 264–267, p. 24.

TOXITABELLÆ HYDRARGYRI CHLORIDI CORROSIVI.

Levy, L. S.: U. S. patent No. 1,204,794 describes the preparation of mercuric chloride tablets. These tablets contain oleoresin of capsicum and volatile oil of mustard, which prevent their being swallowed by mistake.—Chem. Abstr. 1917, v. 11, p. 185.

Walter: A comparison of the methods of the Ph. Germ. V. and of Sasse for the assay of tablets of mercuric chloride. The method of the Ph. Germ. is stated to give low results and to be faulty in other respects.—Pharm. Ztg. 1916, v. 61, p. 298–299, through Chem. Abstr. 1917, v. 11, p. 151.

TRAGACANTHA.

Dohme, A. R. L.: Turkish tragacanth is no longer in the market. Persian gum can be obtained, and, while it does not average as high in quality as the Turkish, very satisfactory grades are obtained in small quantities.—Proc. N. W. D. A. 1917, p. 511.

Hanausek, T. F.: A substitute for tragacanth was found on analysis to consist of a mixture of gypsum and powdered nourtoak root (*Rhus coriaria*).—Arch. Chem. Mikros. 1916, v. 9, p. 69–77, through Chem. Abstr. 1917, v. 11, p. 1330.

TRINITROPHENOL.

Ellis, Carleton L.: Experiments in connection with a method for the production of picric acid from chlorbenzol are described. In employing the dinitrochlorbenzol process, picric acid of high purity was obtained without resorting to crystallization after the preliminary preparation of three intermediates.—Chem. Eng. 1917, v. 25, p. 22–25.

Dehn, William M., and Ball, Alice A.: A report of colorimetric studies on picric acid and picrate solutions.—J. Am. Chem. Soc., 1917, v. 39, p. 1381–1392.

Folin, Otto, and Doisy, E. A.: Attention is called to the impurities found in picric acid, which render the latter unfit for use in the determination of creatine and creatinine in the urine.—J. Biol. Chem., 1917, v. 28, p. 349–356.

Castaigne and Desmoulières: A practical method for the detection of picric acid in the blood serum in cases of simulated icterus.—Ann. chim. analyt., 1917, v. 22, p. 29–30.

Frédoux, M.: A contribution to the estimation of picric acid and its derivatives in the urine, blood, and feces. A colorimetric method in which Le Mitouard's reagent is used is described.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 43–47.

Ganassini, Domenico: A contribution to the chemical diagnosis of simulated icterus, due to the ingestion of picric acid.—Arch. farmacol. sper., 1917, v. 24, p. 289–298.

Lapotte, X.: A colorimetric method for the quantitative determination of picric acid and its derivatives in the body fluids.—Bull. Soc. pharm. Bordeaux, 1917, v. 55, p. 218–225.

Pecker, Henri: A method for the detection of picric acid in urine depends on the fact that picric or picramic acids, if present, give a red coloration when the urine is rendered ammoniacal and brought into contact with ferrous sulphate-tartaric acid solution.—J. pharm. et chim., 1917, v. 15, p. 70–74.

Tixier, Leon: A description of a method for the identification of picric acid in the blood in case of feigned icterus. The method is based on the color change which takes place with methylene blue.—Bull. sc. pharmacol. 1917, v. 24, p. 155–159.

Saladini, Raffaele: A review of the methods for the detection of picric acid when used by malingerers for the production of pseudo icterus.—Arch. farmacol. sper. 1917, v. 24, p. 97–112.

Forni: A report of a fatal case of poisoning due to the ingestion of picric acid.—Rivista Ospedaliera, 1916, v. 6, p. 787–792, through Presse Medicale, 1917, v. 25, p. 504.

TRITICUM.

Dohme, A. R. L.: Several samples offered as couch grass were rejected because they were nonofficial varieties of *Agropyron*. Some samples also contained an excessive amount of stem.—Proc. N. W. D. A. 1917, p. 519.

TROCHISCI.

Roller, Emil: Formulas for sugar lozenges should not be given recognition in a modern pharmacopœia. Their preparation should be left to the confectioner. The next edition of the U. S. P. should, however, give recognition to the truly medicinal lozenges, such as "Sulphur and Cream of Tartar," "Brown Mixture," and "Brown Mixture and Sal Ammoniæ."—D.-A. Apoth.-Ztg. 1917, v. 38, p. 31.

TROCHISCI CARBONIS LIGNI, N. F.

Hommell, P. E.: The troches of charcoal can be improved by omitting the sugar and introducing some calcined magnesia or bicarbonate of soda. These lozenges are intended to be used as an absorbent and antiacid. The presence of sugar in them is therefore certainly contraindicated.—Proc. New Jersey Pharm. Assoc. 1917, p. 82–83.

TROCHISCI GAMBIR, N. F.

Hommell, P. E.: The troches of gambir are a pleasant astringent for throat and bowel troubles, but there is no demand for them, and I doubt if there ever will be.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

ULMUS.

Farwell, Oliver Atkins: "*Ulmus pubescens* Walter" is generally considered to apply to the species of elm described in the U. S. P. As this designation is 15 years older than *Ulmus fulva* Mx., it should be adopted.—Drug. Circ. 1917, v. 61, p. 175–176.

Patch, E. L.: The ash content of three samples of powdered elm bark examined ranged from 9 to 15 per cent. One of the samples showed the presence of foreign starch.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

UNGUENTA.

Asher, Philip: Processes for the assay of the ointments of belladonna, tannic acid, boracic acid, mercury, ammoniated mercury, mercury nitrate, iodine, iodoform, stramonium, sulphur, and zinc oxide should be given in the U. S. P.—Am. J. Pharm. 1917, v. 89, p. 175.

Woodruff, T. L.: The methods described are applicable to the analysis of lubricating greases and ointments. The determinations include those of mineral matter, moisture, other volatile matter, iodine absorption, rosin, saponifiable and unsaponifiable matter.—Chem. Analyst, 1917, v. 20, p. 8–11.

Cook, E. Fullerton: Notes on the sanitary dispensing of ointments.—Apothecary, 1917, v. 14, No. 3, p. 16.

Reller, Emil: White petrolatum alone, or mixed with lanolin, should replace lard and suet in the preparation of the official ointments.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 31.

Axelrad, S.: Notes on the preparation of cetyl alcohol for use as a substitute for lanolin in the preparation of ointments.—J. Ind. & Eng. Chem. 1917, v. 9, p. 1123.

Jaudon: A contribution to the study of pomades, with special reference to the choice of excipients.—Répert. pharm. 1917, v. 28, part 2, p. 194–198; see also P. Carles, p. 225–226, 324–327.

Lannett, W. N.: Some remarks on the use of hardened cottonseed oil as an ointment base.—Pract. Drug. 1917, v. 35, No. 2, p. 34.

Engelhardt, H.: A list of German substitutes for the common ointment bases with directions for preparing the same.—J. Am. Pharm. Assoc. 1917, v. 6, p. 56–59.

Spalding, C. G.: Descriptive notes on the parparation of ointments containing hydrocarbon greases.—Apothecary, 1917, v. 29, No. 7, p. 13–14.

Russell, H.: In a discussion of the need for selecting the proper ointment base from a therapeutical standpoint, the author cites methods for preparing the following ointments: Camphor and chloral, ammoniated mercury, resorcinol, and thymol iodide.—Drug. Circ. 1917, v. 61, p. 242.

Issoglio, Giovanni: Data showing the oxidizability number of ointments containing mercury and lead are given.—Giorn. farm. chim. 1917, v. 66, p. 273–278.

Hommell, P. E.: It is suggested that there be introduced into the N. F. an ointment of ichthyol of the following formula: Ichthyol, [illegible] gm.; hydrous wool fat, 250 gm.; petrolatum, 500 gm.—Proc. New Jersey Pharm. Assoc. 1917, p. 82.

UNGUENTUM AQUÆ ROSÆ.

Anon.: A discussion of a number of formulas for cold cream.—Am. Druggist, 1917, v. 65, No. 8, p. 30.

Elliot, Georges: The presence of 1 per cent of borax in the ointment of rose water of the Ph. Brit. is annoying when this ointment is intended to be used as a vehicle for salicylic acid, resorcin, lead oleate, calomel, zinc oxide, etc.—Pharm. J. 1917, v. 99, p. 283.

UNGUENTUM CALAMINÆ, N. F.

Anon.: The testimony of physicians has shown that calamine is superior to zinc carbonate or zinc oxide in the treatment of a certain type of sluggish ulcers. For this reason calamine ointment has been retained in the N. F., IV.—N. A. R. D. J. 1917, v. 25, p. 456.

UNGUENTUM DIACHYLON.

Beringer, George M.: In the formula for the preparation of diachylon ointment, white petrolatum has been substituted for olive oil. This is an improvement, as the use of the latter yielded an ointment which was too fluid in consistence.—Am. J. Pharm. 1917, v. 89, p. 353.

UNGUENTUM HYDRARGYRI.

Issoglio, G.: If mercurial ointment contains fat with a high oxidizability value (18 to 19), the use of rancid fat is indicated, while an extremely high value (74 to 100) points to the presence of oil of turpentine.—Ann. chim. applicata, 1917, v. 7, p. 187–199.

Pozen, M. A.: Of 26 samples of mercurial ointment examined, 13 were not of U. S. P. quality.—Rep. District of Columbia Health Off. 1917, p. 51.

Tice, William G.: Of six samples of mercurial ointment examined, three were below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

Wile, U. J., and Elliott, J. A.: A report of investigations to determine the mode of absorption of mercury in the inunction treatment of syphilis.—J. Am. M. Assoc. 1917, v. 68, p. 1024–1028.

UNGUENTUM HYDRARGYRI AMMONIATI.

Rippetoe, J. R.: The U. S. P. should give an assay method for determining the ammoniated mercury content of the ointment. Determination as the sulphide gives very good results.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

Stout, Henry: The darkening of the color of the Ph. Brit. ointment of ammoniated mercury is very likely due to the benzoic acid which is present in the benzoated lard used in preparing the ointment. It is therefore thought that benzoated lard is not the best base for use in the preparation of this ointment.—Pharm. J. 1917, v. 98, p. 187.

UNGUENTUM HYDRARGYRI DILUTUM.

Baird, R. O.: All of the 16 samples of blue ointment assayed met the requirements of the U. S. P.—Bull. North Dakota Exper. Sta. F. Dept. 1917, v. 4, p. 392.

Fox, William G.: Of 54 samples of diluted mercurial ointment examined, 25 were below standard.—Rep. New Jersey Dept. Health, 1917, p. 62.

UNGUENTUM HYDRARGYRI OXIDI FLAVI.

Rippetoe, J. R.: It is desirable that the U. S. P. give a method of assay for determining the yellow mercury oxide content of the ointment.—Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

UNGUENTUM IODI.

Prusse, Francis J.: Notes on the preparation of iodine ointment.—Merck's Rep. 1916, v. 25, p. 77–78.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate of deterioration of iodine ointment, and to discover a method for the prevention of the same.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

Warren, L. E.: Analytical data relative to the iodine content and stability of U. S. P. and commercial iodine ointments are presented.—Am. J. Pharm. 1917, v. 89, p. 339–346.

Dohme, A. R. L.: Iodine ointment, when made by the official U. S. P. process calling for 4 per cent of available iodine, shows immediately after preparation only 3.5 per cent of available iodine. After several days the available iodine drops to 3 per cent. Samples several years old showed only 0.5 to 0.9 per cent of available iodine.—Proc. Am. Drug Mfg. Assoc. 1917, p. 183.

UNGUENTUM IODOFORMI.

Umney, John C.: The ointment of iodoform, Ph. Brit., becomes discolored on standing, owing to the liberation of free iodine. This is due to the use of lard in its preparation. To prevent the discoloration the addition of 1 per cent of potassium carbonate is suggested.—Pharm. J. 1917, v. 99, p. 213.

UNGUENTUM PHENOLIS.

Lascoff, J. Leon: The reduction in the phenol strength of the ointment of phenol (from 3 to 2.25 per cent) is justified, in that a portion of the phenol no longer separates on standing.—Am. Druggist 1917, v. 65, No. 5, p. 26.

Roller, Emil: The changes in the U. S. P. formula for the preparation of ointment of phenol are no improvement over the old formula, since the phenol is not dissolved, but merely held mechanically in the form of fine particles, which unite when the ointment is brought in contact with water, and may thereby exert a caustic action upon the skin.—D.-A. Apoth.-Ztg. 1917, v. 38, p. 41.

Dohme, A. R. L.: The committee on standards and deterioration of the American Drug Manufacturers' Association finds it desirable to determine the rate of deterioration of phenol ointment, and to discover a method for the prevention of the same.—Proc. Am. Drug Mfg. Assoc. 1917, p. 184.

UNGUENTUM PICIS COMPOSITUM, N. F.

Anon.: Notes on the preparation of compound tar ointment.—N. A. R. D. J. 1917, v. 23, p. 765.

UNGUENTUM PICIS LIQUIDÆ.

Elliot, George: Tar ointment forms a hard mass, resembling Burgundy pitch, when mixed with zinc oxide. –Chem. & Drug. 1917, v. 89, p. 1060.

UNGUENTUM SULPHURIS COMPOSITUM, N. F.

Anon.: A method of preparing compound sulphur ointment stated to be superior to that given in the N. F. is described.—N. A. R. D. J. 1917, v. 24, p. 17.

UNGUENTUM ZINCI OXIDI.

Austin, R. A.: Zinc oxide ointment is prepared by placing the zinc oxide on a strainer, consisting of two layers of cheesecloth, and pouring on the melted benzoinated lard heated to 135° F. The mixture is stirred with a spatula to force through the zinc oxide.—Drug. Circ. 1917, v. 61, p. 243.

Mueller, Ambrose: A description of a method for the preparation of zinc oxide ointment which is stated to be superior to that given in the U. S. P.—Meyer Bros. Drug. 1917, v. 38, p. 388.

Jackson, Frank A.: Of 186 samples of zinc ointment examined, 101, or 54.4 per cent, were not of U. S. P. standard.—Rep. Rhode Island F. & D. Com. 1916, p. 16.

Pozen, M. A.: Of 23 samples of zinc ointment examined, 14 did not meet the requirements of the U. S. P.—Rep. District of Columbia Health Off. 1917, p. 51.

URANII NITRAS.

Muller, Arno: From experiments it is concluded that the explosive properties of uranium nitrate are not due to the accidental presence of radium.—Chem. Ztg. 1917, v. 41, p. 439, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 373.

MacNider, William DeB.: A consideration of the relative toxicity of uranium nitrate for animals of different ages.—J. Exper. Med. 1917, v. 26, p. 1–17.

Wilcox, Reynold W.: A discussion of the therapeutics of uranium nitrate.—Med. Rec. 1917, v. 92, p. 361–364.

VALERIANA.

Rusby, H. H. Much Japanese valerian root has been offered for import and has finally been accepted as genuine. There is still some doubt as to whether the Japanese plant is *Valeriana officinalis* or a distinct species, but it is of excellent odor and taste, very clean, and is in reality superior to the European form for medicinal purposes. It is very dark in color.—J. Am. Pharm. Assoc. 1917, v. 6, p. 415.

Rydén, Th. A method for the assay of valerian root is based on the determination of its volatile acid content. Results obtained by the author's method gave 2.908 to 4.772 per cent of volatile acids for the rhizomes of *Valeriana officinalis* and 5.33 to 8.221 per cent for the rhizomes of *Valeriana excelsa* Poiret.—Svensk farm. Tidskr. 1917, v. 21, p. 525.

Söderberg, Ivar. By distillation with steam and extraction with ether, the rhizomes of *Valeriana officinalis* L. yielded 3.04 to 3.38 per cent of essential oil and the rhizomes of *Valeriana sambucifolia* Mik. gave 2.43 to 2.48 per cent.—Svensk farm. Tidskr. 1917, v. 21, p. 481-482.

Holste, Arnold. A discussion of the various applications of valerian and a comparison of its different synthetic and galenical products.—Deutsch. med. Wchnschr. 1916, v. 42, p. 599-600, through Chem. Abstr. 1917, v. 11, p. 3381.

VANILLA, N. F.

Anon. A short account of the cultivation and preparation of vanilla for the market.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 142-144.

Callmeyer, R. G. General information is given relative to the vanillas imported from the Comores Islands.—Simmon's Spice Mill. 1917, v. 40, p. 950-953.

Carter, James G. From data at hand it appears that the 1917 crop of vanilla in the French Islands of the South Indian Ocean was approximate 500 tons.—Com. Rep. 1917, No. 102, p. 418.

Rabak, Frank. A study of the effect of curing on the aromatic constituents of vanilla beans. A reprint.—Am. Perf. 1917, v. 12, p. 205-206.

Von Fellenberg. A colorimetric method for the evaluation of cinnamon, cassia and vanilla is described.—Am. Perf. 1917, v. 11, p. 324.

Anon. Notice of judgment No. 4791 relates to the adulteration of vanilla. S. R. A.—Chem. 1917, p. 286.

VANILLINUM.

Issoglio, Giovanni. Methods for the preparation of vanillin are described and the forms of adulteration are discussed.—Giorn. farm. chim. 1917, v. 66, p. 121-126.

Anon.: Notes on the synthetic preparation of vanillin, including a concise description of a method for preparing the same from eugenol.—Perf. & Ess. Oil Rec. 1917, v. 8, p. 149–150.

Estes, C.: A description of a colorimetric method for the determination of vanillin. The method depends on the quantitative production of a red-violet color by the action of an acid solution of mercuric nitrate.—J. Ind. & Eng. Chem. 1917, v. 9, p. 142.

Reid, E. Emmet: In describing work on the identification of phenols, the identification of vanillin by means of α-bromo-p-nitrotoluene is considered.—J. Am. Chem. Soc. 1917, v. 39, p. 304–309.

VERATRUM VIRIDE.

Scoville, Wilbur L.: An assay for veratrum viride should be introduced into the next Pharmacopoeia. If not, good reasons, based upon investigation, should be given for not doing so.—Am. Druggist, 1917, v. 65, No. 1, p. 26.

VERBASCI FOLIA, N. F.

Farwell, Oliver Atkins: Since the genus *Verbascum* contains 200 or more species of wide variation in physical, and probably in therapeutic properties, it appears to be more appropriate to limit the drug to *Verbascum thapsus*.—Drug. Circ. 1917, v. 61, p. 231.

VERBENA.

Dohme, A. R. L.: Two samples of blue vervain examined were rejected because they were composed of nonofficial species of verbena.—Proc. N. W. D. A. 1917, p. 519.

VIBURNUM OPULUS, N. F.

Rusby, H. H.: The folly of taking the action that was at one time recommended to the U. S. P. revision committee of defining cramp bark as the bark of *Acer spicatum*, on the ground that the genuine drug could not be obtained, has been demonstrated by the appearance on the market of rather abundant supplies of true *Viburnum opulus*.—J. Am. Pharm. Assoc. 1917, v. 6, p. 409.

Alsberg, C. L.: A survey of the *Viburnum* barks on the market showed that in most instances the bark of mountain maple (*Acer spicatum* Lam.) had been substituted for the true cramp bark (*Viburnum opulus* L.). Likewise, the preparations of *Viburnum opulus* L. on the market were, in large part, prepared from the bark of *Acer* species. S. R. A.—Chem. 1917, No. 20, p. 59.

Dohme, A. R. L.: *Acer spicatum* is still occasionally offered as true cramp bark.—Proc. N. W. D. A. 1917, p. 519.

St. John, B. H.: Descriptions of some color reactions obtained with the extract of *Acer spicatum* (false viburnum opulus, viburnum opulus U. S. P. VIII).—Am. J. Pharm. 1917, v. 89, p. 10–13.

VIBURNUM PRUNIFOLIUM.

Rusby, H. H.: Attention may well be called here to the ill-advised endeavor of the Medical Council of the A. M. A. to discredit this valuable drug. Undoubtedly there have been many wild claims made for the therapeutic activity of viburnum on the part of manufacturers of proprietary preparations but it is equally true that medical practice has been full of cases in which life has been saved by its judicious use.—J. Am. Pharm. Assoc. 1917, v. 6, p. 415.

Anon.: There is evidently a mistake in the new description of this drug, since it refers to the bark of the tree in general and not the bark of the root. N. A. R. D. J. 1917, v. 24, p. 683.

Dohme, A. R. L.: Two lots of black haw examined were adulterated with 18 per cent of wood and earthy matter.—Proc. N. W. D. A. 1917, p. 519.

Roberts, J. G.: A 69-bag lot of black haw examined contained about 23 per cent of foreign matter, consisting of stems, roots and rootlets. Other shipments have contained as high as 50 per cent of stems.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 91.

VINA.

Beringer, George M.: The elimination of all wines from the Pharmacopoeia was probably due to a misunderstanding of the requirements of the Brussels international protocol.—Am. J. Pharm. 1917, v. 89, p. 353.

Anon.: The Russian minister of the interior defines medicated wines as wines which, in addition to the usual component parts of wine, contain medicaments in solution in such quantity that the average therapeutic dose will not contain over 10 grams of alcohol.—Chem. & Drug. 1917, v. 89, p. 17.

Besson, A. A.: A report of researches on the determination of oxalic acid in wines.—Schweiz. Apoth.-Ztg. 1917, v. 55, p. 81-85.

VINUM CARNIS ET FERRI, N. F.

Snyder, J. P.: The N. F. gives lengthy tests for solid extract of beef but gives no test for wine of beef and iron. The Internal Revenue Department requires that the protein content of wine of beef and iron must be at least 1.4 per cent.—J. Am. Pharm. Assoc. 1917, v. 6, p. 714.

[illegible], F. Henry: The use of amber-colored bottles will inhibit the tendency of the wine of beef and iron to decompose. Decomposition is due to the effect of light and heat. These agencies bring about the reduction of the ferric salt to the ferrous condition and the oxidation of citric acid with the liberation of carbon dioxide.—Drug. Circ. 1917, v. 61, p. 397.

VINUM IPECACUANHÆ, N. F.

Hommell, P. E.: The wine of ipecac is a most valuable preparation as an expectorant and diaphoretic to associate with the spirit of mindererus and nitrous ether for bronchial trouble in children. It should not be employed, however, as an emetic, as the alcohol which it contains defeats the operation of emesis.—Proc. New Jersey Pharm. Assoc. 1917, p. 81.

VINUM PEPSINI, N. F.

Messinger, M. Lester: A formula stated to be superior to that given in the N. F. for the preparation of wine of pepsin is given.—Apothecary, 1917, v. 14, No. 3, p. 22.

XANTHOXYLUM.

Farwell, Oliver Atkins: The proper spelling for this generic name is *Zanthoxylum.* Linneas used *Z* for the initial letter, but Miller changed it to *X.* The original spelling should be restored.—Drug. Circ. 1917, v. 61, p. 176.

Bocquillon, H.: Descriptions of the active principles of the different species of *Xanthoxylum.*—Répert. pharm. 1917, v. 28, part 2, p. 66–67, 226–228.

ZINCI ACETAS.

Rippetoe, J. R.: The U. S. P. assay method for zinc acetate is faulty, due to the fact that the addition of hot diluted nitric acid to the zinc sulphide liberates sulphur, which forms a gummy mass and occludes some of the zinc, thus giving a low figure. Dissolving the sulphide in dilute hydrochloric acid and precipitating as the carbonate, gives satisfactory results —Drug. Circ. 1917, v. 61, p. 502; J. Am. Pharm. Assoc. 1917, v. 6, p. 465.

ZINCI CHLORIDUM.

Sjostrom, F. W.: A volumetric method for the estimation of zinc in zinc chloride, nitrate, and sulphate. An excess of pure hydrogen dioxide solution is added to an alkaline solution of the zinc salt, and the excess of alkali titrated.—Ztschr. angew. Chem. 1916, v. 29, ref. 511, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 153.

Boldt, H. J.: A note on the use of zinc chloride in the treatment of uterine hemorrhage.—J. Am. M. Assoc. 1917, v. 68, p. 832–833.

ZINCI OXIDUM.

Le Wall, Charles H.: It is asserted that 90 per cent of the zinc oxide on the market at the present time will not satisfy the U. S. P. test for the absence of heavy metals, and that in the majority of cases lead is present in an amount ranging from 0.1 to 0.5 per cent calculated as metallic lead. Two tests for the presence of lead, more satisfactory than that of the U. S. P., are described.—Am. J. Pharm. 1917, v. 89, p. 353–355.

Dohme, A. R. L.: Two samples of zinc oxide of American manufacture contained 0.34 per cent of lead, calculated as lead oxide.—Proc. N. W. D. A. 1917, p. 516.

Roberts, J. G.: Most of the lots of zinc oxide examined contained heavy metals in excess of the U. S. P. standard. Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

ZINCI PHENOLSULPHONAS.

Adanti, Guido: A detailed description of a volumetric method for the determination of zinc phenolsulphonate. The method is based on the liberation of $C_6H_4(OH)SO_3H$ by H_2SO_4, and the reaction of the former with a known amount of Br to form $C_6H_2Br_3(OH)$ and HBr. By determining the bromine which remains uncombined, the amount which enters into combination can be computed and the weight of the zinc phenolsulphonate calculated therefrom.—Boll. chim.-farm. 1917, v. 56, p. 317–318.

ZINCI SULPHAS.

Sjostrom, F. W.: A volumetric method for the estimation of zinc in zinc chloride, nitrate, and sulphate. An excess of pure hydrogen dioxide solution is added to an alkaline solution of the zinc salt, and the excess of alkali titrated.—Ztschr. angew. Chem. 1916, v. 29, ref. 511, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 153.

ZINCUM.

Baxter, G. P., and Grose, M. R.: A report of the revision of the atomic weight of zinc by the electrolytic determination of zinc in zinc bromide. The number found was 65.388.—Chem. News, 1917, v. 115, p. 6–8.

Dohme, A. R. L.: One lot of zinc (mossy), supposed to be arsenic free, when examined showed a trace of arsenic. It was considered U. S. P. zinc, as the amount of arsenic found was within the limit permitted for ordinary U. S. P. zinc. Another lot of zinc (small granules) tested contained considerably more arsenic than is permitted by the U. S. P.—Proc. N. W. D. A. 1917, p. 516.

Dohme, A. R. L.: The U. S. P. recommends a nickle dish previously coated electrolytically with silver or copper for the assay of zinc. Fully as good, if not better, results can be obtained in much less time by the use of a mercury cathode cup.—Proc. N. W. D. A. 1917, p. 503.

von Bichowsky, F. R.: Analytical data obtained in the titration of zinc by the electrometric method and the processes in common use are presented.—J. Ind. & Eng. Chem. 1917, v. 9, p. 668–671.

Makao, Manzo: A comparative investigation of the electrolytic determination of zinc with the Fischer gauze electrode.—J. Pharm. Soc. Japan, 1917, No. 419, p. 29.

Fenner, G., and Rothschild: Notes on the estimation of zinc by Schaffner's method.—Ztschr. analyt. Chem. 1917, v. 56, p. 384–390, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 580.

Hassreidter, V.: A discussion of the various modifications of Schaffner's method for the determination of zinc. The average results obtained are said to be trustworthy.—Ztschr. analyt. Chem. 1917, v. 56, p. 311–316, through J. Chem. Soc. Lond. 1917, v. 112, part 2, p. 509.

Hastings, J. H.: A description of Low's ferrocyanide method for the determination of zinc, with a brief discussion of the Waring method.—Chem. Abstr. 1917, v. 11, p. 1112.

Springer, J. W: An investigation of volumetric methods for the determination of zinc. A modification of the method proposed by L. Blum was found to be the most useful.—Ztschr. angew. Chem. 1917, v. 13, p. 173–174, through J. Soc. Chem. Ind. 1917, v. 36, p. 944.

ZINGIBER.

Farwell, Oliver Atkins: The proper source of ginger is *Zingiber Zingiber* (Linné) Karsten, instead of *Zingiber officinale* Roscoe.—Drug. Circ. 1917, v. 61, p. 176.

Anon.: Notes on the ginger industry of southern India.—Perf. & Ess. Oil Rec. 1917, v. 8, No. 9, p. 26.

Dohme, A. R. L.: Samples of Jamaica ginger examined within the past year were extremely poor, thin, and fibrous, with apparently too little resin.—Proc. N. W. D. A. 1917, p. 513.

Nomura, Hiroshi: Researches on the pungent principles of ginger. Part I. A new ketone, zingerone (4-hydroxy-3-methoxy-phenylethyl methyl ketone) occurring in ginger.—J. Chem. Soc. Lond. 1917, v. 111, p. 769–776.

Lapworth, Arthur et al: A report of investigations undertaken for the purpose of determining the characteristics and decomposition products of Thresh's "gingerol."—J. Chem. Soc. Lond. 1917, v. 111, p. 777–798.

Nelson, E. K.: Some notes on the pungent principles of ginger and grains of paradise. Gingerol and paradol appear to be isomeric monomethyl ethers of the same dihydric phenol.—J. Am. Chem. Soc. 1917, v. 39, p. 1466–1469.

Grier, James: A review of papers by H. Nomura and A. Lapworth on the pungent principle of ginger published subsequent to those of Garnett and Grier.—Pharm. J. 1917, v. 99, p. 172–173, 205 and 216–217.

Anon.: The oleoresin content of 3 samples of African ginger assayed was above standard. The oleoresin content of 5 samples of Jamaica ginger assayed was also above standard.—Proc. Pennsylvania Pharm. Assoc. 1917, p. 92.

Patch, E. L.: Several lots of ginger examined tested unusually high in alcohol extract, viz: 8, 9.5, 7.5, 10.25, 7.7, 6.5 and 7 per cent, respectively.—J. Am. Pharm. Assoc. 1917, v. 6, p. 410.

Street, John Phillips: The examination of 10 commercial samples of ginger gave the following result: Total ash, 4.01 to 6.51 per cent.—Rep. Connecticut Agric. Exper. Sta. 1917, p. 151-152.

Anon.: Notice of judgment No. 4517 relates to the adulteration of Jamaica ginger.—S. R. A.-Chem. 1917, p. 28.

HYGIENIC LABORATORY BULLETINS OF THE PUBLIC HEALTH SERVICE.

The Hygienic Laboratory was established in New York, at the Marine Hospital on Staten Island, August, 1887. It was transferred to Washington, with quarters in the Butler Building, June 11, 1891, and a new laboratory building, located in Washington, was authorized by act of Congress March 3, 1901.

Of the bulletins published by the laboratory since its establishment, copies of the following are available for distribution and may be obtained without cost by applying to the Surgeon General, United States Public Health Service, Washington, D. C.

No. 2.—Formalin disinfection of baggage without apparatus. By M. J. Rosenau.

No. 43.—The standardization of tetanus antitoxin (an American unit established under authority of the act of July 1, 1902). By M. J. Rosenau and John F. Anderson.

No. 44.—Report No. 2 on the origin and prevalence of typhoid fever in the District of Columbia, 1907.—By M. J. Rosenau, L. L. Lumsden, and Joseph H. Kastle.

No. 45.—Further studies upon anaphylaxis. By M. J. Rosenau and John F. Anderson.

No. 46.—*Hepatozoon perniciosum* (n. g., n. sp.): a hæmogregarine pathogenic for white rats; with a description of the sexual cycle in the intermediate host, a mite (*lelaps echidnimus*). By W. W. Miller.

No. 50.—Further studies upon the phenomenon of anaphylaxis. By M. J. Rosenau and John F. Anderson.

No. 51.—Chemical tests for blood. By Joseph H. Kastle.

No. 52.—Report No. 3 on the origin and prevalence of typhoid fever in the District of Columbia (1908). By M. J. Rosenau, Leslie L. Lumsden, and Joseph H. Kastle.

No. 53.—The influence of certain drugs upon the toxicity of acetanilide and antipyrine. By Worth Hale.

No. 55.—Quantitative pharmacological studies: adrenalin and adrenalin-like bodies. By W. H. Schultz.

No. 59.—The oxidases and other oxygen catalysts concerned in biological oxidations. By Joseph H. Kastle.

No. 61.—Quantitative pharmacological studies; Relative physiological activity of some commercial solutions of epinephrin. By W. H. Schultz.

No. 65.—Facts and problems of rabies. By A. M. Stimson.

No. 66.—I. The influence of age and temperature on the potency of diphtheria antitoxin. By John F. Anderson. II. An organism (*Pseudomonas protea*) isolated from water, agglutinated by the serum of typhoid-fever patients. By W. H. Frost. III. Some considerations on colorimetry, and a new colorimeter. By Norman Roberts. IV. A gas generator in four forms, for laboratory and technical use. By Norman Roberts.

No. 68.—The bleaching of flour and the effect of nitrites on certain medicinal substances. By Worth Hale.

No. 73.—The effect of a number of derivatives of choline and analogous compounds on the blood pressure. By Reid Hunt and R. de M. Taveau.

No. 75.—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and the National Formulary (third edition) for the calendar year ending December 31, 1908. By Murray Galt Motter and Martin I. Wilbert.

No. [illegible].—The physiological standardization of ergot. By Charles Wallis Edmunds and Worth Hale.

No. [illegible].—Report No. 4 on the origin and prevalence of typhoid fever in the District of Columbia, 1909. By L. L. Lumsden and John F. Anderson. (Including articles contributed by Thomas B. McClintic and Wade H. Frost.)

No. [illegible].—Tissue proliferation in plasma medium. By John Sundwall.

No. [illegible].—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and the National Formulary (third edition) for the calendar year ending December 31, 1910. By Murray Galt Motter and Martin I. Wilbert.

No. [illegible].—Index-catalogue of medical and veterinary zoology. Subjects: Cestoda and cestodaria. By Ch. Wardell Stiles and Albert Hassall.

No. [illegible].—Studies on typhus. By John F. Anderson and Joseph Goldberger.

No. [illegible].—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and on the National Formulary (third edition) for the calendar year ending December 31, 1911. By Murray Galt Motter and Martin I. Wilbert.

No. [illegible].—Sewage pollution of interstate and international waters with special reference to the spread of typhoid fever. VI. The Missouri River from Sioux City to its mouth. By Allan J. McLaughlin.

No. [illegible].—Epidemiologic studies of acute anterior poliomyelitis. I. Poliomyelitis in Iowa, 1910. II. Poliomyelitis in Cincinnati, Ohio, 1911. III. Poliomyelitis in Buffalo and Batavia, N. Y., 1912. By Wade H. Frost.

No. [illegible].—I. The cause of death from subdural injections of antimeningitis serum. By Worth Hale. II. Some new [illegible] media. By Joseph Goldberger.

No. 94.—I. Collected studies on the insect transmission of Trypanosoma evansi. By M. Bruce Mitzmain. II. Summary of experiments in the transmission of anthrax by biting flies. By M. Bruce Mitzmain.

No 95.—Laboratory studies on tetanus. By Edward Francis.

No. 96.—I. Report of investigations of coastal waters in the vicinity of Gulfport and Biloxi, Miss., with special reference to the pollution of shellfish. By R. H. Creel. II. 1. A comparison of methods for the determination of oxygen in waters in presence of nitrite. By Elias Elvove. 2. Some new compounds of the choline type. III. The [illegible] properties of preparations of [illegible]. By G. A. Menge. 3. The detection of added phosphorus in matches. By Earle B. Phelps. 4. The chemical composition of rubber in nursing nipples and in some rubber toys. By Earle B. Phelps and Albert F. Stevenson. 5. The analysis of thymol capsules. By Atherton Seidell. 6. Seasonal variation in the composition of the thyroid gland. By Atherton Seidell and Frederic Fenger. 7. Note on a new apparatus for use with the Winkler method for dissolved oxygen in water. By Hyman L. Shoub. 8. The pharmacological action of some mercury preparations. By Carl Voegtlin.

No. 97.—1. Some new Siphonaptera. 2. A further report on the identification of some Siphonaptera from the Philippine Islands. 3. The taxonomic value of the copulatory organs of the females in the order of Siphonaptera. By Carroll Fox.

No. 100.—I. Physiological standardization: a comparison of the physiological activity of some commercial pituitary preparations. By George B. Roth. II. Examination of drinking water on railroad trains. By Richard H. Creel. III. Variation in the epinephrine content of suprarenal glands. By Atherton Seidell and Frederic Fenger.

No. 101.—I. Digitalis standardization. The physiological valuation of fat-free digitalis and commercial digitalin. By George B. Roth. II. Preliminary observations on metabolism in pellagra. By Andrew Hunter, Maurice H. Givens, and Robert C. Lewis.

No. 102.—I. Chemical changes in the central nervous system as a result of restricted vegetable diet. By Mathilde L. Koch and Carl Voegtlin. II. Chemical changes in the central nervous system in pellagra. By Mathilde L. Koch and Carl Voegtlin.

No. 104.—Investigation of the pollution and sanitary conditions of the Potomac watershed; with special reference to self-purification and sanitary condition of shellfish in the lower Potomac River. By Hugh S. Cumming. With plankton studies by W. C. Purdy and hydrographic studies by Homer P. Ritter.

No. 106.—Studies in pellagra. I Tissue alteration in malnutrition and pellagra. By John Sundwall. II. Cultivation experiments with the blood and spinal fluid of pellagrins. By Edward Francis. III. Further attempts to transmit pellagra to monkeys. By Edward Francis.

No. 108.—Experimental studies with muscicides and other fly-destroying agencies. By Earle B. Phelps and A. F. Stevenson.

No. 109.—I. Pituitary standardization, 2: The relative value of infundibular extracts made from different species of mammals and a comparison of their physiological activity with that of certain commercial preparations. By George B. Roth. II. Pharmacological studies with cocaine and novocaine; a comparative investigation of these substances in intact animals and on isolated organs. By George B. Roth.

No. 110. I. The standardization of antityphoid vaccine. By George W. McCoy. II. A colorimetric method for the estimation of the cresol or phenol preservative in serums. By Elias Elvove. III. Toxicity of certain preservatives used in serums, viruses, and vaccines. By James P. Leake and Hugh B. Corbitt. IV. Observations on the significance of antisheep amboceptor in human serum, with reference to complement fixation test for syphilis. By Mather H. Neill.

No. 111.—I. The pathology and pathogenesis of myelitis. By N. E. Wayson. II. Experimental poliomyelitis By J. P. Leake. III. Attempts to induce poliomyelitis in small laboratory animals. By A. M. Stimson. IV. Report on attempts to cultivate the virus of poliomyelitis. By N. E. Wayson.

No. 112.—I. Phenols as preservatives of antipneumococcic serum; a pharmacological study. By Carl Voegtlin. II. The nature of contaminations of biological products. By I. A. Bengtson. IV. Studies in preservatives of biological products: The effects of certain substances on organisms found in biological products. By M. H. Neill. IV. The effect of ether on tetanus spores and on certain other microorganisms. By H. B. Corbitt.

No. 113.—I. An experimental investigation of the toxicity of certain organic arsenic compounds. By George B. Roth. II. On the toxicity of emetine hydrochloride, with special reference to the comparative toxicity of various market preparations. By Gleason C. Lake.

No. 114.—Index catalogue of medical and veterinary zoology. Subject: Roundworms. By Ch. Wardell Stiles and Albert Hassall.

No. 115.—I. Notes on the detection of B. tetani. By G. W. McCoy and Ida A. Bengtson. II. The standardization of pituitary extracts. By Reynold A. Spaeth.

No. 116. I. The influence of vitamines on the course of pellagra. By Carl Voegtlin, M. H. Neill, and Andrew Hunter. II. The chemical composition of the blood of pellagrins. By Robert C. Lewis. III The amino acid fractions and hippuric acid in the urine of pellagrins. By John R. Murlin. IV The occurrence of pellagra in nursing infants, with observations on the chemical composition of the human milk from pellagrous mothers. By Carl Voegtlin and R. H. Harries.

No. 117. Filariasis in southern United States. By Edward Francis.

No. 119. Digest of comments on the Pharmacopœia of the United States of America and on the National Formulary for the calendar year ending December 31, 1916. By A. G. Du Mez.

No. 120. 1. The experimental production of pellagra in human subjects by means of diet. By Joseph Goldberger and G. A. Wheeler. 2. The pellagra producing diet. By M. X. Sullivan and K. K. Jones. 3. Biological study of a diet resembling the Rankin Farm diet. By M. X. Sullivan. 4. Feeding experiments with the Rankin Farm pellagra-producing diet. By M. X. Sullivan.

No. 121. The generic names of bacteria. By Ella M. A. Enlows.

No. 122. I. Deterioration of typhoid vaccine. By G. W. McCoy and Ida A. Bengtson. II. Standardization of gas gangrene antitoxin. By Ida A. Bengtson. III. Potency of bacterial vaccines suspended in oil (lipovaccines). By Ida A. Bengtson.

No. 123.—An account of some experiments upon volunteers to determine the cause and mode of spread of influenza (in November and December, 1918, and February and March, 1919, at San Francisco and Boston). Three papers.

No. 124.—I. Differentiation between various strains of meningococci by means of the agglutination and the absorption of the agglutinins tests. By C. T. Butterfield and M. H. Neill. II. The biologic reactions of antimeningococcic serums. By Alice C. Evans. III. Effect of heating and freezing upon the antibody content of antimeningococcic serum. By C. T. Butterfield. IV. The fermentation reactions and pigment production of certain meningococci. By Clara E. Taft. V. Studies on the lethal action of some meningococci on mice, with special reference to the protective properties of antimeningococcic serum. By M. H. Neill and Clara E. Taft.

No. 125.—Digest of comments on the Pharmacopoeia of the United States of America and on the National Formulary for the calendar year ending December 31, 1917. By A. G. DuMez.

In citing these bulletins bibliographers and authors are requested to adopt the following abbreviations: Bull. No. —, Hyg. Lab., Wash., pp. —.

The service will enter into exchange of publications with medical and scientific organizations, societies, laboratories, journals, and authors. All applications for these publications should be addressed to the "Surgeon General, U. S. Public Health Service, Washington, D. C."

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
[illegible] CENTS PER COPY

BINDING SECT. JAN 31 1967

RA
421
U4
no.125
cop.2

National Institutes of Health (U.S.)
Bulletin

Biological
& Medical
Serials

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY